



**LevelOne**

**FPS-3003**

**2-port USB/MFP Server**

User`s Manual

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# Chapter1 Introduction

Thank you for purchasing the FPS-3003 USB MFP server. This product is designed to connect your printers, USB Mass Storage/Memory Card Reader, and scanners of HP Office Jet series all-in-one printers (MFP), anywhere in your network, allowing all network users access to shared USB devices resources.

## 1.1 About this Manual

This manual provides introductory information as well as detailed instructions on how to set up and manage the print server in various network environments. To fully benefit from this manual, you should be familiar with basic networking principles.

These instructions are based on the settings in a new MFP server. To reload the Factory Parameters, you can perform a Factory Default, which will restore most of the settings. See "Factory Default" on page.

## 1.2 Support Services

Should you require any technical assistance, please contact your product reseller. Or you can visit our website at <http://www.level1.com> for latest product information.

This manual is subject to changed without notice.

# Chapter2 Product Overview

## 2.1 Package Contents

Verify that nothing is missing from the FPS-3003 USB MFP server package by using the checking list below. Please contact your dealer if anything is missing or damaged. All packing materials are recyclable. Please confirm the items in the Package below:

- One FPS-3003 USB/MFP Server.
- One FPS-3003 MFP Control Center Software CD.
- One AC Adaptor.
- One Quick Installation Guide.

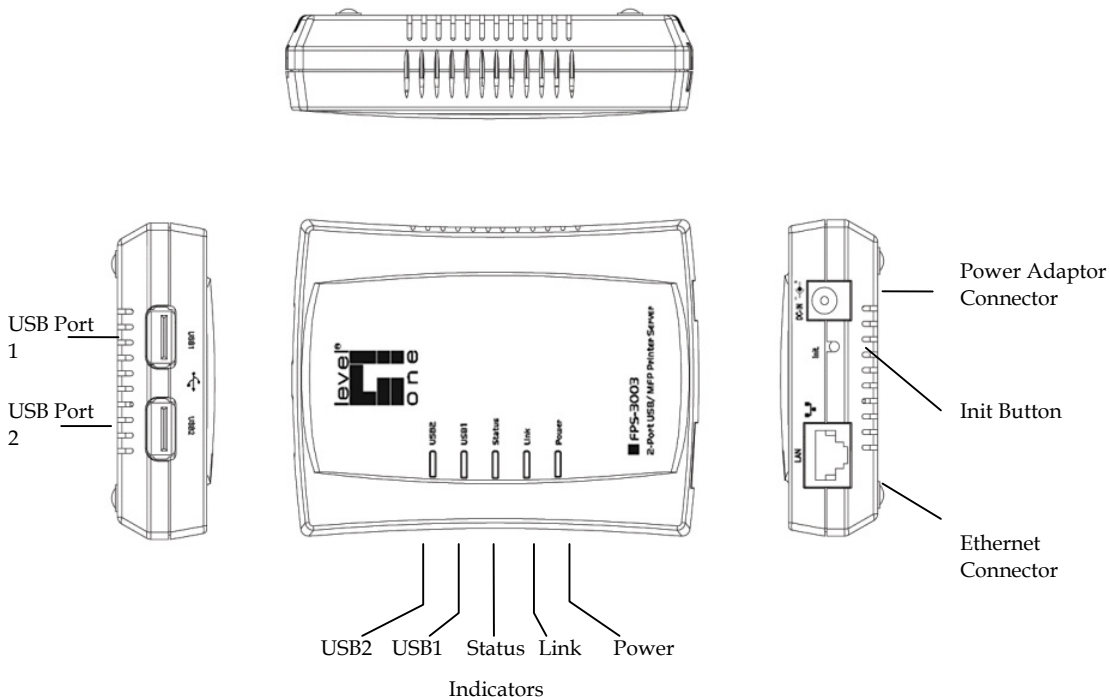
## 2.2 FPS-3003 USB MFP Server Product CD

The FPS-3003 USB MFP Server Product CD provides an easy-to-use control center software for Windows PC, and user documents.

### 2.2.1 Start-up Procedures for Windows

If your computer is configured to auto start CDs, the FPS-3003 USB MFP Server Product CD will start automatically when inserted. You can also navigate to the CD and start the autorun.exe file from within the Windows file manager.

## 2.3 Physical Description



### 2.3.1 Ethernet Connector

The network connector of FPS-3003 is designed for 10 Mbps or 100 Mbps Ethernet networks and connects to the network via a twisted pair category 5 cable (10baseT and 100baseTX) or better.

### 2.3.2 USB Host Ports

FPS-3003 has two USB host ports which are USB 1.1/2.0 low and full speed compliant and successfully tested with USB 1.1/2.0 printers, Mass Storage and HP Office Jet series printers (MFP).

### 2.3.3 Init Button

The **Init** button is used for:

- printing a page of configuration report to check the connection to the printer and showing the MFP server settings
- performing a Factory Default of the MFP server, which will restore most of the parameters and settings to factory default values
- performing the new firmware upgrade using in fallback

### 2.3.4 Indicators

- *Power Indicator* is lit while power is applied. If it is not lit, or if it blinks, there is a problem with MFP server or Power Adapter.
- *Link Status* is lit while network is applied. If it is not lit, it indicates that the server does not connect to network.
- *Status Indicator* blinks to indicate network activity.
- *USB1 Indicator* is lit while an USB device connects to USB1 Port of MFP server. If it is not lit, or if it blinks, there is a problem with the USB device or the MFP server.
- *USB2 Indicator* is lit while an USB device connects to USB2 Port of the MFP server. If it is not lit, or if it blinks, there is a problem with the USB device or the MFP server.

## 2.4 Installation Methods

### 2.4.1 Installation and Integration

Refer to the table below to select the appropriate installation method. LevelOne MFP Control Center tool is available on the FPS-3003 USB MFP Server Product CD or from LevelOne's web site.

Function	OS	Method	Description
Print Server	Windows	Standard Windows Add Printer Wizard	Installation of LPR, Raw TCP, Local Port Using SMB, and IPP
		MFP Control Center Tool	Installation of LPR, Raw TCP, Local Port Using SMB
	Unix/Linux	Edit /etc/printcap File	Using vi or other editors to edit the <i>printcap</i> file
		RedHat Linux Printer System Manager	Using X-Windows Interface to operate
File Server	Windows	None	Don't need installation
	Unix/Linux	Samba	Use smbclient in Samba
Scan Server	Windows	MFP Control Center tool	Installation of SANE Client and SANE-Twain Driver
	Unix/Linux	SANE Frontends	Use SANE Applications such as XSANE

### 2.4.2 Configuration and Management

FPS-3003 USB MFP server can be configured and managed from its internal web pages, using HTTP or from user software: *FPS-3003 MFP Control Center*, using Windows. These web pages or PC tools offer you a management tool that is suitable for all supported network environments.

## 2.5 Features and Benefits

FPS-3003 provides the following features and benefits:



1. **Reliability:** The MFP server provides high performance and reliability combined with low power consumption.
2. **Flexibility:** The MFP server supports print/File/Scan sharing in all major computer systems and environments.
3. **Easy to Install:** The MFP server installs, operates and is managed in a reliable and easy fashion.
4. **Security:** You can assign administrator name and password to restrict login.
5. **Monitoring:** The MFP server's web pages and user software allow you to continuously monitor MFP status.
6. **Future Proof:** The firmware stored in the MFP server Flash memory can be upgraded over the network. This allows you to quickly update and enhance its operational features when new MFP server software becomes available.

# Chapter3 Basic Installation

## 3.1 Connecting the Hardware

1. Make sure that your USB devices are switched off and that the MFP server's Power Adapter is disconnected.
2. Connect the USB devices to the USB ports using the USB cables.
3. Connect the MFP server to the network using a twisted pair category 5 cable, 10baseT or 100baseTX.
4. Turn on the USB devices and make sure it is ready for use.
5. Connect the Power Adapter to the server. The power indicator will light up and USB1 and USB2 indicators will flash in turn. When the Link indicator lights up, the server is correctly connected to the network. When USB1 and USB2 indicators do not flash, the server starts to work normally.
6. If you connected USB HP printers to server, please press the Init button for 3 seconds on the server once to print a page of server configuration report.

## 3.2 Assigning an IP Address to the MFP Server

### 3.2.1 Preliminary

- If you have a DHCP server on your network, your MFP server will receive an IP address automatically. The IP address will then appear on user software: *FPS-3003 MFP Control center* or on the page of configuration report that you printed earlier. If your DHCP server does not give IP address to the server, the server will use the Factory IP address: 192.168.1.100.
- If you are not working in a DHCP network, you need to set an IP address of MFP server manually.

### 3.2.2 Ethernet Address

You do not need to know the Ethernet address of your FPS-3003 USB MFP server for assigning an IP address to it. MFP Control Center software can automatically search MFP servers and list their Ethernet

addresses. Besides, you can find Ethernet address that is located on the backside label of the server.

### **3.2.3 IP Address**

Unless you are assigning an IP address using DHCP, you must obtain an unused IP address from your network administrator.

### **3.2.4 Methods for Setting the IP Address**

You can set the IP address of your FPS-3003 USB MFP server using one of the following methods, depending on your network operating environment:

- Automatic IP Address Assignment
- Manual IP Address Assignment

### **3.2.5 Host Names and Host Name Rules**

The host name of the FPS-3003 USB MFP server is specified by “FPS-3003” in Factory Parameter. If you put two or more KMFP servers in your local area network, to avoid using same host names you have to change the host names by LevelOne MFP Control Center or server’s web pages. If your host name is longer than 15 characters, FPS-3003 USB MFP server limits the length of host name to 15 characters.

### **3.2.6 Set the IP Address Using DHCP**

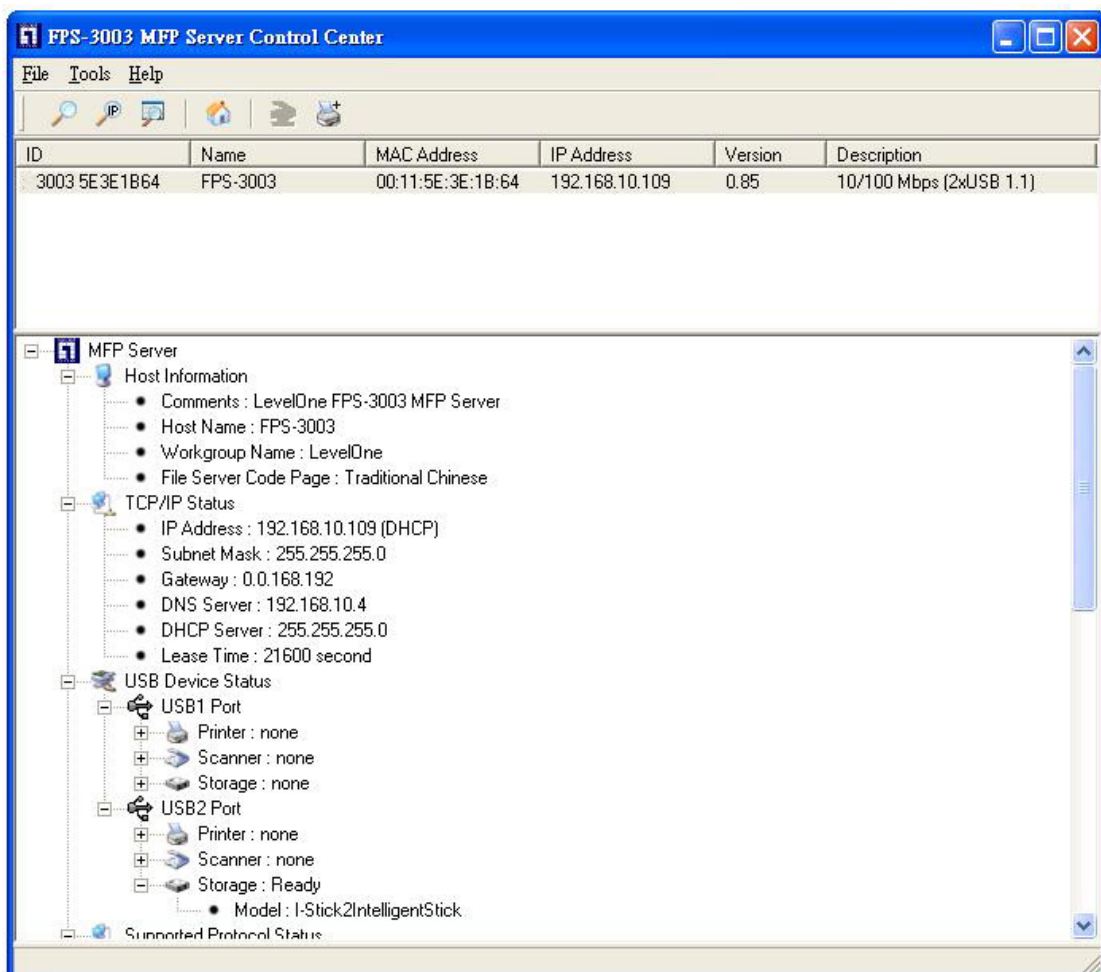
Follow the instructions below to get an IP address using DHCP:

1. Edit or create a scope in the DHCP manager of the DHCP daemon. The entries included in this scope should contain the following parameters:
  - range of IP addresses
  - subnet mask
  - default router IP address
  - DNS server IP address
  - lease duration
2. Activate the scope. The MFP server automatically gets the DHCP parameters. If you are using DNS, you may include at least one DNS server IP address in the DHCP scope or manually set DNS server IP in MFP server’s web pages or LevelOne MFP Control

Center tool.

### 3.2.7 Set the IP Address Using LevelOne MFP Control Center

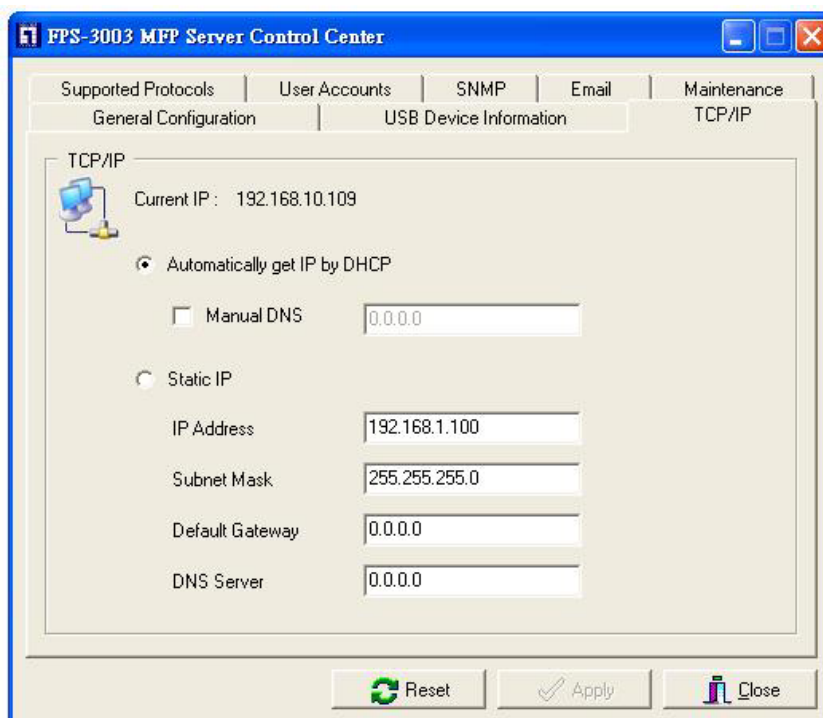
1. Install LevelOne MFP Control Center. LevelOne MFP Control Center is available in the FPS-3003 USB MFP Server Product CD.
2. Start LevelOne MFP Control Center and Auto-searching MFP server window will appear.
3. If the tool finds MFP servers in your local area network, then you have to select a MFP server from the server list.



4. Double click the highlight list and type the server's administrator (default: *admin*) and password (default: *admin*).



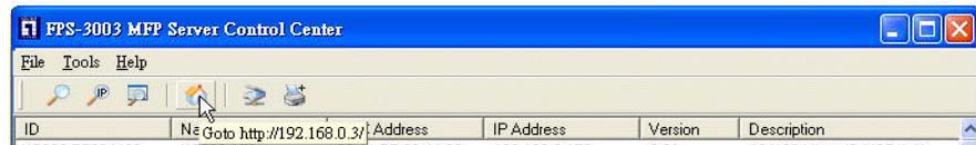
5. After you login successfully, from the Server menu, select TCP/IP. The Set IP Address dialog appears.



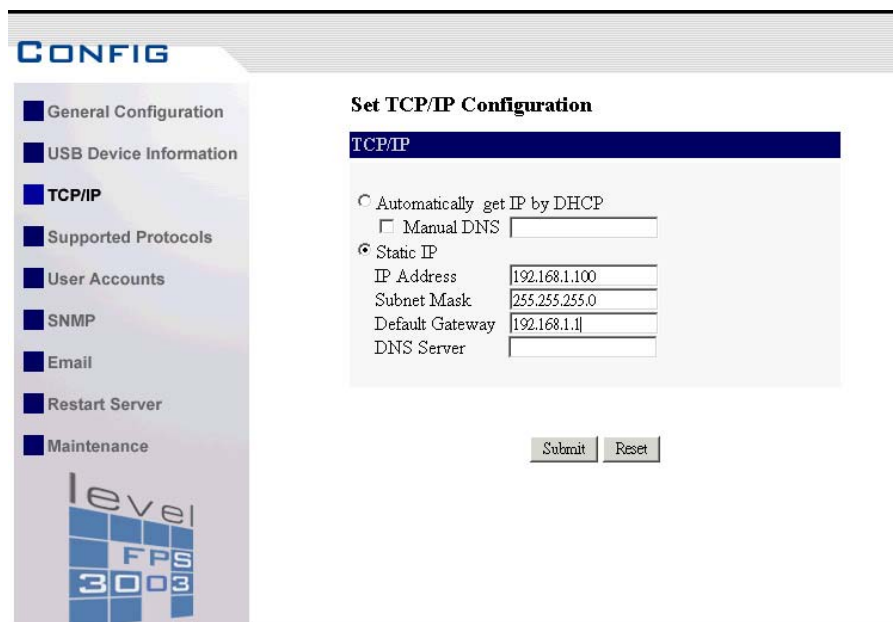
6. Click the button that corresponds to your choice of IP setting method (static or dynamic using DHCP). When assigning a static IP address you also have to define Subnet Mask and Default Gateway. If you choose **Automatically get IP by DHCP**, you can use desired DNS by clicking the **Manual DNS** button and manually assigning a DNS.
7. Click **Apply** to save your settings. And the server will reboot.
8. You have now finished the procedure of setting the IP address.

### 3.2.8 Set the IP Address Using Server's Web Pages

1. If you don't know the current IP of server, you have to do the Step1~Step4 of Set the IP Address Using LevelOne MFP Control Center.
2. You can see the IP address of MFP server in the server list. Open IE Browser and type server's IP address or click the Home Icon of LevelOne MFP Control center.



3. Go to the web page and click TCP/IP icon.



4. Login your administrator (default: *admin*) and password (default: *admin*).
5. Click the button that corresponds to your choice of IP setting methods (static or dynamic using DHCP). When assigning a static IP address you also have to define Subnet Mask and Default Gateway.

## Set TCP/IP Configuration

TCP/IP

Automatically get IP by DHCP

Manual DNS

Static IP

IP Address

Subnet Mask

Default Gateway

DNS Server

6. Click **Submit** to save your settings. And the server will reboot. You have now finished the procedure of setting the IP address.

## 3.3 Naming Your USB Devices

### 3.3.1 Printer Names

- *Default Printer Name*
  1. The system will set the printer model names as the default printer names. The system only allows a 12 characters long USB device name. For example, the printer model name is "*psc 1300 series*" and then the default printer name will be set as "*psc 1300 ser*".
  2. If system can not get the printer model (For ex, you use some parallel printers and use Parallel-to-USB cables to connect the printers), the default printer names are set as: *USB1\_Printer* and *USB2\_Printer* with respect to USB1 port and USB2 port.

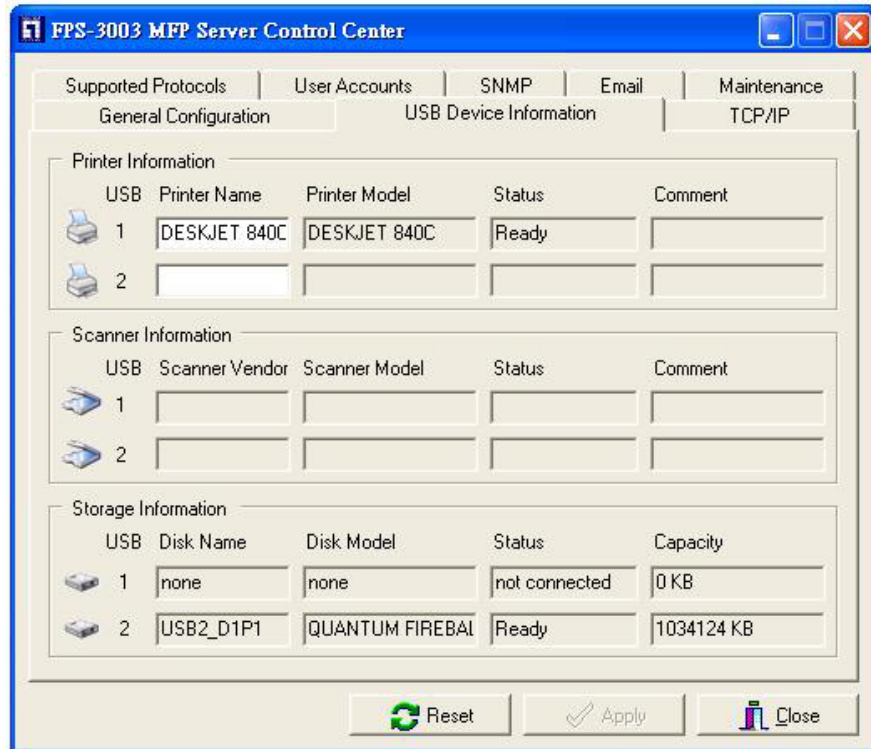
- *Set Printer Name*

You can set yourself printer names by LevelOne MFP Control Center or server's web pages.

- i. Using LevelOne MFP Control Center
  1. Start LevelOne MFP Control Center and Auto-searching MFP server window will appear.
  2. If the tool finds MFP servers in your local area network,

then you have to select a MFP server from the server list.

3. Double click the highlight list and type the server's administrator (default: *admin*) and password (default: *admin*).
4. After you login successfully, from the Server menu, select USB Device Information. The Set USB Device Information dialog appears.



5. Set your printer names in **Printer Name** box and then click **Apply**.

ii. Using Server's Web Pages

1. Go to the web page and click **USB Device Information** icon.
2. Login your administrator (default: *admin*) and password (default: *admin*).



### Set USB Device Configuration

Printer Information				
USB	Printer Name	Printer Model	Status	Comment
1	psc 1310 ser	psc 1310 series	ready	
2				

Scanner Information				
USB	Scanner Vendor	Scanner Model	Status	Comment
1	HP	psc 1310 series	ready	multi-function peripheral
2				

Storage Information				
USB	Disk Name	Disk Model	Status	Capacity
1	none	none	not connected	0 KB
2	USB2_D1P1	CREATIVEMuVo TX FM	ready	502616 KB

3. Set your printer names in **Printer Name** box and then click **Apply**.

### 3.3.2 Storage Names

The local drives of the two storages in USB1 port and USB2 port are named as USBx\_DxPx, where USBx represents the USBx port, Dx represents the the x-th Disk (in particular to card reader plugging in multiple cards) and Px represents the x-th partition.

### 3.3.3 Scanner Names

The name of connected scanner of HP office jet series consists of the "vender" + "model". For example, the scanner name of HP PSC 1310 office jet is named as "HP PSC 1310 series".

# Chapter4 Adding Printers in Windows

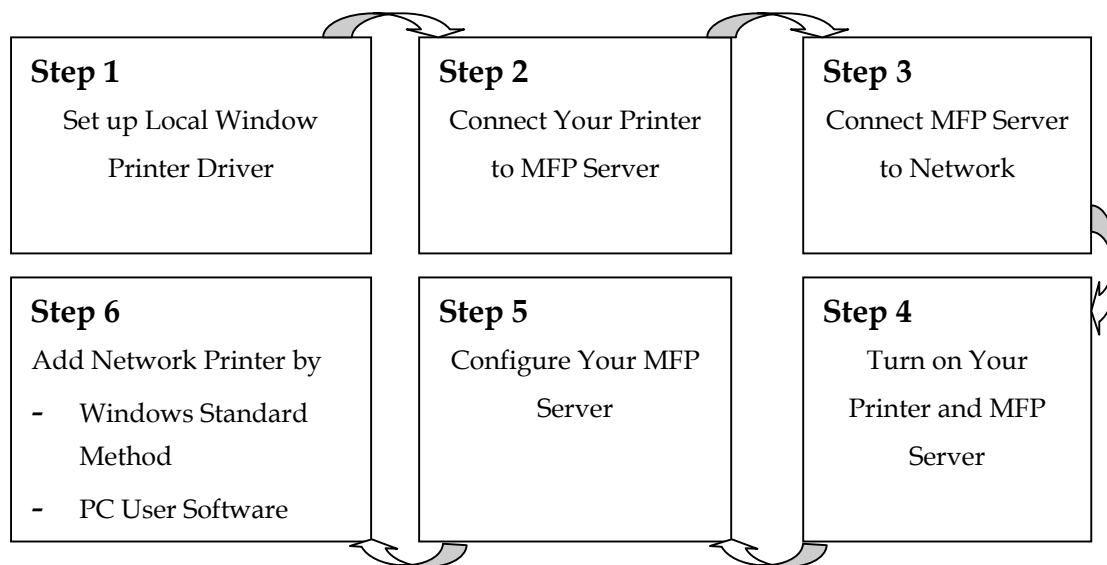
## 4.1 Overview of Installation Methods

This chapter describes how to add network printers to Windows PC.

### Table List for Installing Network Printer

Windows Platform	Printing Protocols	Method
Windows 98, ME, 2000,XP and 2003	SMB Printing	Standard Windows Add Printer Wizard
		LevelOne MFP Control Center's Add Printer
	IPP Printing	Standard Windows Add Printer Wizard
Windows 2000, XP and 2003	LPR Printing	Standard Windows Add Printer Wizard
		LevelOne MFP Control Center's Add Printer
	Raw TCP Printing	Standard Windows Add Printer Wizard
		LevelOne MFP Control Center's Add Printer

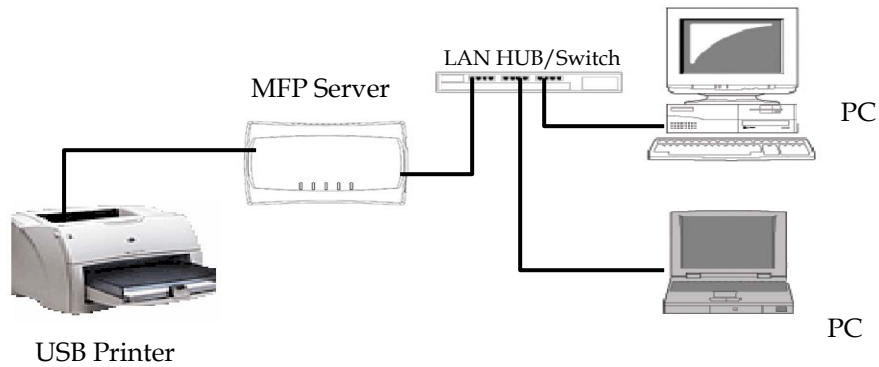
### Steps for Installing Network Printer



## 4.2 Connecting FPS-3003 MFP Server

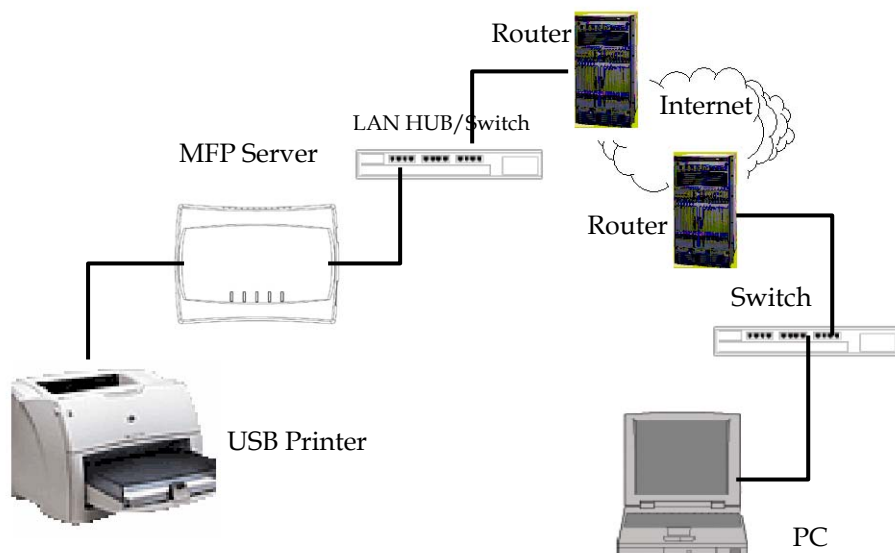
To configure your server correctly, you have to know your server connecting to what type of network topology.

### 4.2.1 MFP Server and Windows PC on Same LAN

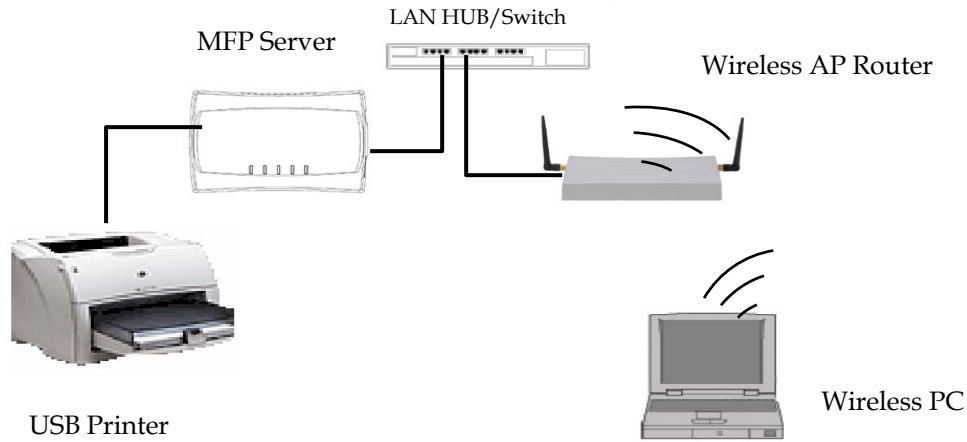


### 4.2.2 MFP Server and Windows PC on Different LANs

#### 1. Wired Windows PC across Internet



## 2. Wireless Windows PC



### 4.3 Setting up Local Windows Printer Driver

You are advised to install your Windows printer driver in advance. For most printers, you can install the printer drivers as the following procedure:

1. Click Start, click **Control Panel**, click Printers and Other Hardware, and then click Printers and Faxes.
2. Double click Add Printer to start the Add Printer Wizard, and then click Next.
3. Click Local printer, clear the **Automatically detect and install my Plug-n-Play printer** check box to avoid having to wait for the completion of another printer search, and then click Next. If you leave this option selected, Windows will attempt to find the printer itself and figure out what kind it is. If Windows does not find the printer, the wizard will continue as described in this task.
4. Select a Windows driver for your printer. Click Next.
5. Choose whether you want to share the printer with other network users. Do you want to print a test page? Select the appropriate radio button and click **Next** and **Finish**.

### 4.4 Adding Network Printers in Windows

Follow the instructions below to use the standard Windows Add Printer

Wizard and LevelOne MFP Control Center for adding a network printer in Windows 98 SE, ME, 2000, XP and 2003. Before adding a network printer, you are advised to install the local Windows printer driver in advance.

#### 4.4.1 Using Standard Windows Methods for SMB Printing

##### Protocol

**Windows Platform:** Windows 98SE, ME, 2000, XP and 2003

1. Open Printers and Faxes
2. Right-click the printer for which you want to change settings, and then click **Properties**.
3. Click the **Ports** tab.
4. Clear **Enable bidirectional support** and click **add port**, and then click Local Port in the Port type section.

In the Port Name box, type the path to the printer in the following format: "\\ *server's host name*\printer name" or "\\ *server's IP address* \printer name" (Please refer to server's web pages or LevelOne MFP Control Center tool to know exact path). For example: if you set server's host name as FPS-3003 and printer name (USB1 port) as psc 1300 ser, then the network path is expressed as: \\FPS-3003\psc 1300 ser



*✎ If your server is running on a different LAN than your windows PC such as wireless Windows PC, you must type IP address in **Port Name** box.*

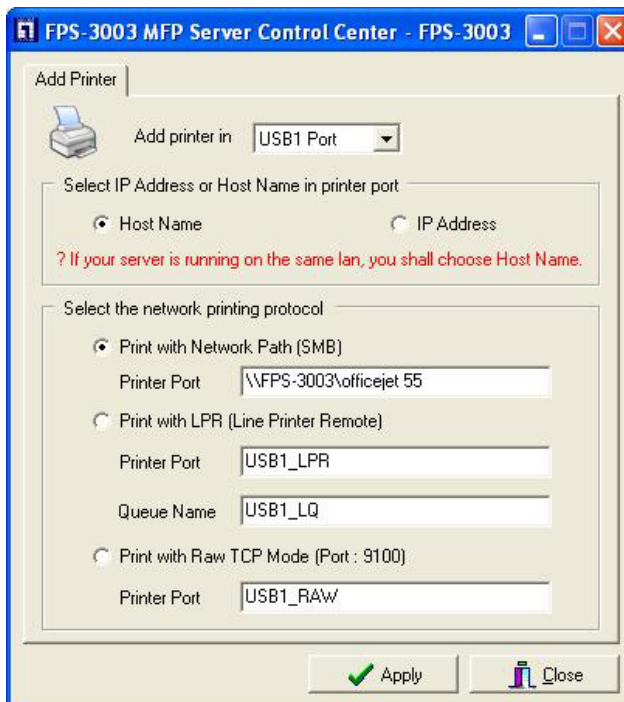
5. Click OK, and then select a Windows driver for your printer. If you already have the printer's driver installed, you will be asked whether to keep it or to replace it. Click Next.
6. Choose whether you want to share the printer with other network users. Do you want to print a test page? Select the appropriate radio button and click **Next** and **Finish**.

## 4.4.2 Using LevelOne MFP Control Center Tool for SMB

### Printing

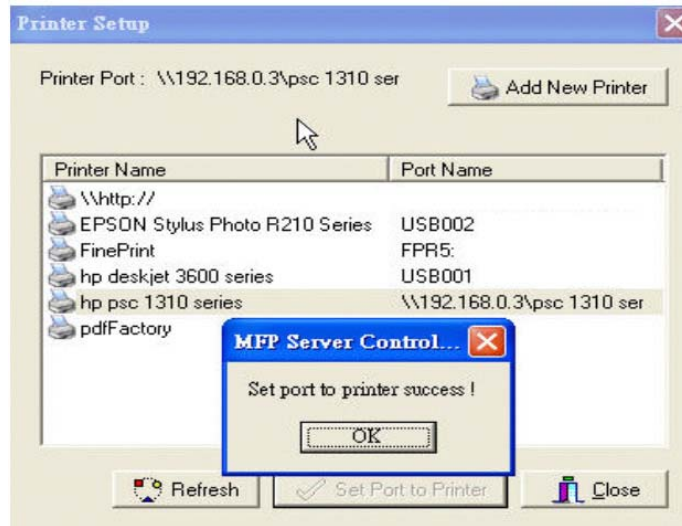
**Windows Platform:** Windows 98, ME, 2000, XP and 2003

1. Start LevelOne MFP Control Center, select your MFP server and click **Add Printer**.
2. Select USB1 Port or USB2 Port to add the printer in **Add the printer** box, choose to use host name or IP address to represent MFP server in **Select IP Address or Host Name in printer port** box, and select the network printing protocol of **Printing with Network Path (SMB)**.



*⚠ If your server is running on a different LAN than your Windows PC such as wireless Windows PC, you must choose IP address in **Select IP address or Host Name in printer port** box.*

3. Click **Apply**.
4. Select the desired printer driver and click **Set Port to Printer**.

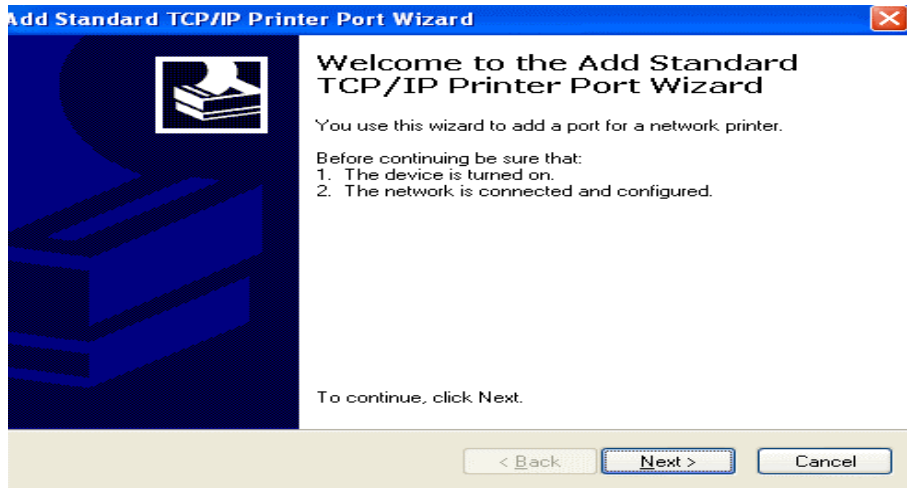


5. If you can not find any printer driver in Printer List, please install your printer driver first or click **Add New Printer** to install the printer driver.

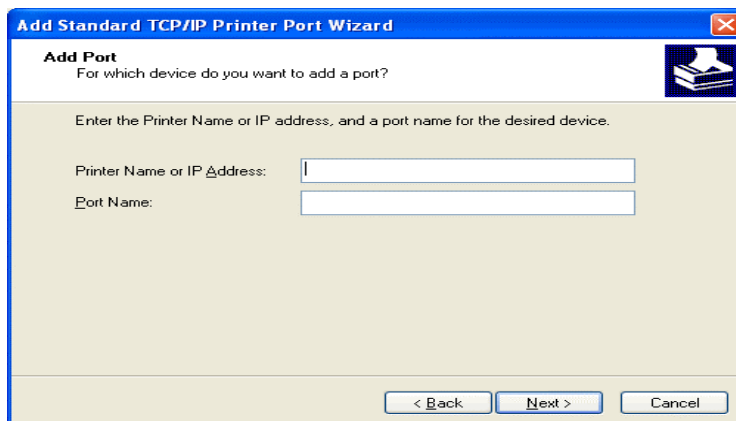
#### 4.4.3 Using Standard Windows Methods for LPR Printing Protocol

**Windows Platform:** Windows 2000, XP and 2003

1. Open Printers and Faxes
2. Right-click the printer for which you want to change settings, and then click **Properties/ports**
3. Clear **Enable bidirectional support** and click **Add port**, and then click Standard TCP/IP Port from the dropdown and click **New port**.
4. The "**Add Standard TCP/IP Printer Port Wizard**" will pop up and click **Next**.



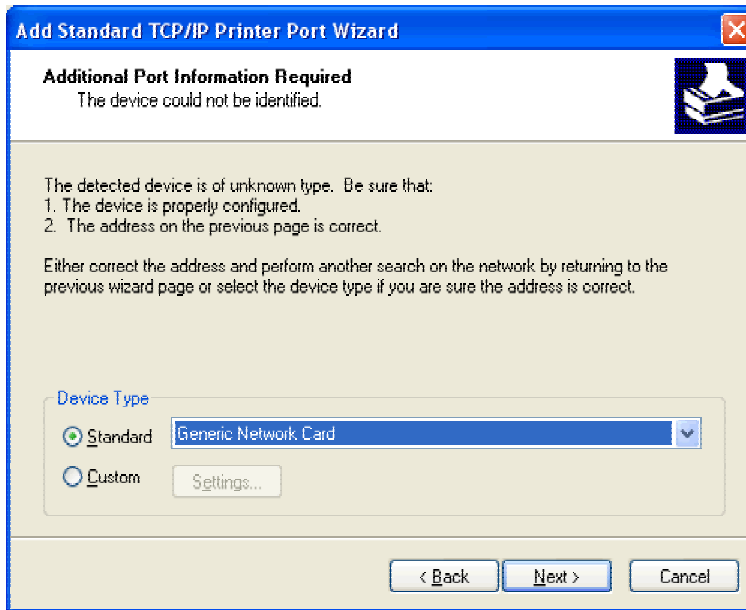
5. In the **Printer Name or IP Address** box, type host name of the MFP server (default: FPS-3003) or IP address of MFP server. In the **Port Name** box, type your desired names or **USB1\_LPR** or **USB2\_LPR** for printer connected to USB1 port and USB2 port, respectively.



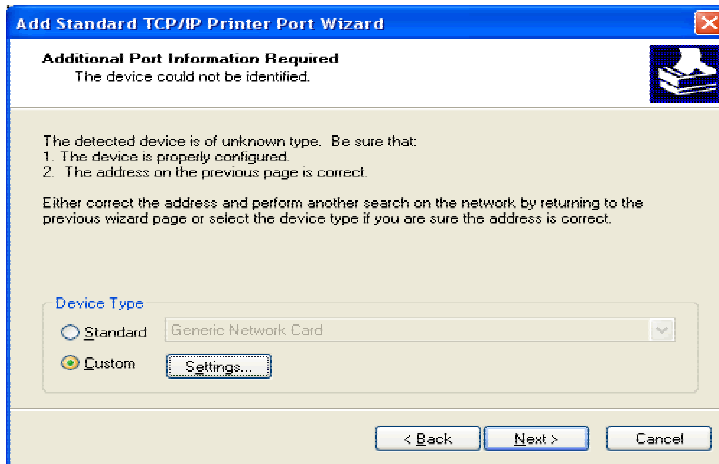
*⚠ If your server is running on a different LAN than your Windows PC such as wireless Windows PC, you must type server's IP address in **Printer Name or IP Address** box.*

6. Click **Next**.

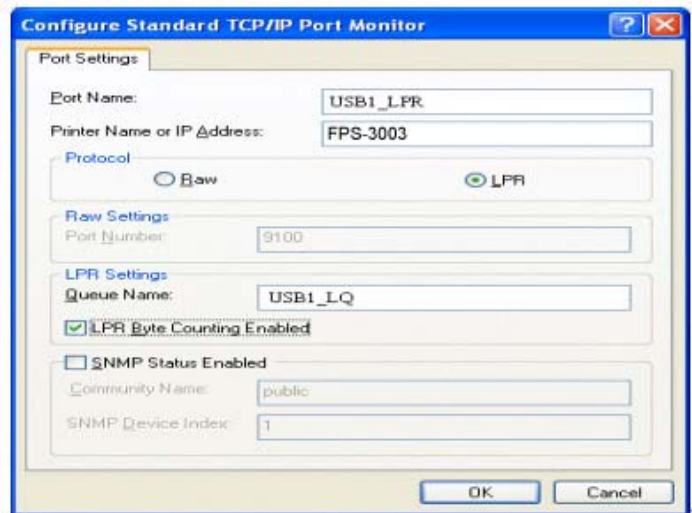




7. Click **Custom/settings**.



8. Click Settings and confirm that the settings are as below. The queue names are **USB1\_LQ**, **USB2\_LQ** for USB1 port 1 and USB2 port, respectively.



9. Click **OK** to finish.

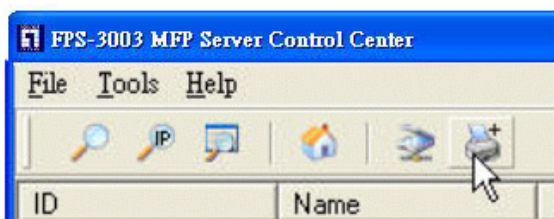


#### 4.4.4 Using LevelOne MFP Control Center Tool for LPR

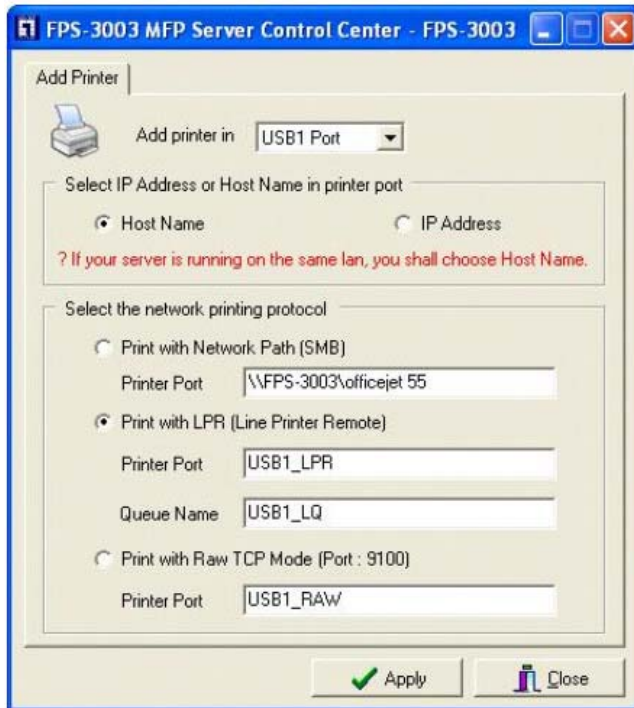
##### Printing

**Windows Platform:** Windows 2000, XP and 2003

1. Start LevelOne MFP Control Center, select your MFP server and click **Add Printer**.

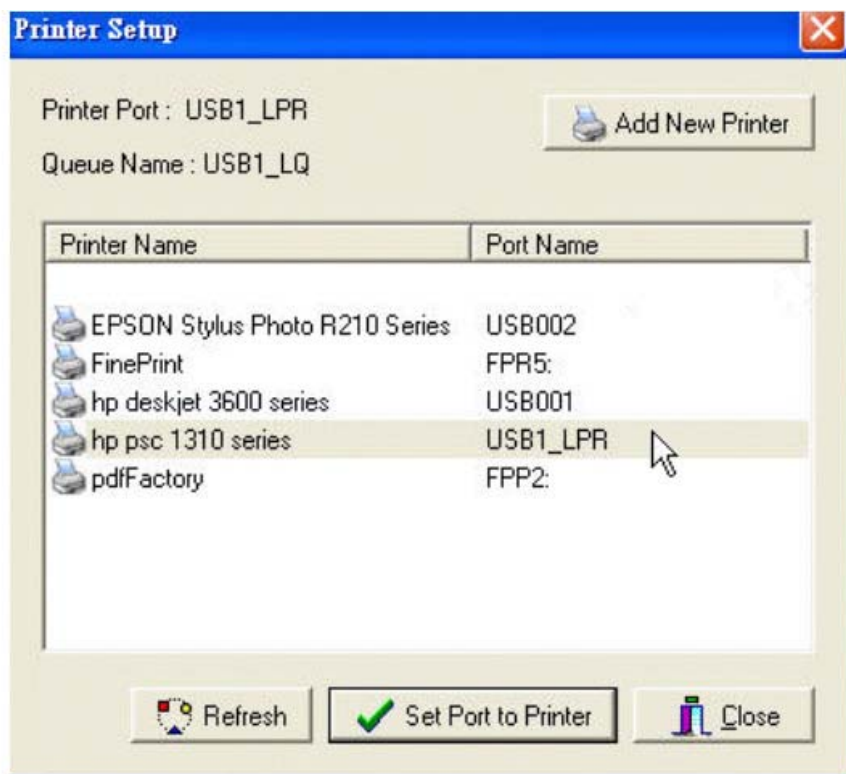


2. Select USB1 Port or USB2 Port to add the printer in **Add the printer** box, choose to use host name or IP address to represent MFP server in **Select IP address or Host Name in printer port** box, and select the network printing protocol of **Printing with LPR (Line Printer Remote)**.



*✎ If your server is running on a different LAN than your Windows PC such as wireless Windows PC, you must choose IP address in **Select IP address or Host Name in printer port** box.*

3. Click **Apply**.
4. Select the desired printer driver and click **Set Port to Printer**.



5. If you can not find any printer driver in Printer List, please install your printer driver first or click **Add New Printer** to install the printer driver.

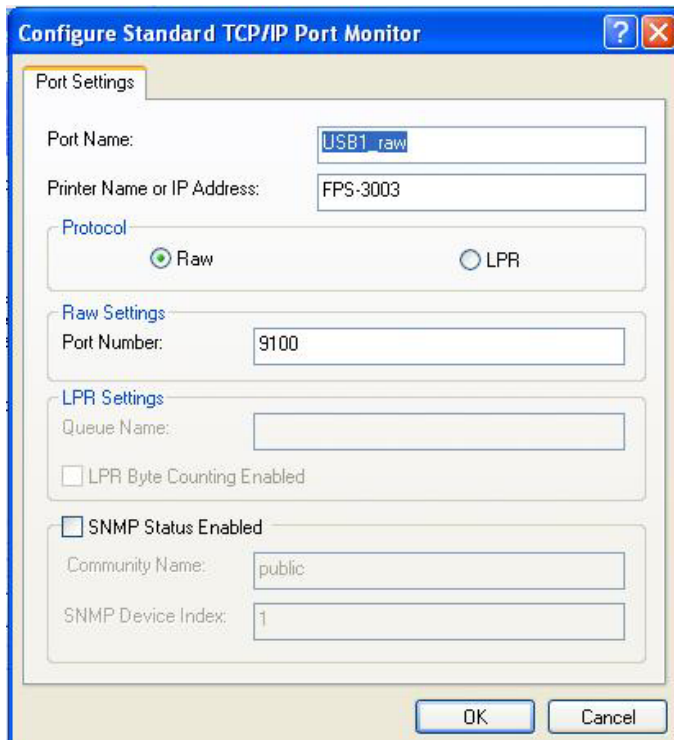
#### 4.4.5 Using Standard Windows Method for Raw TCP Printing

**Windows Platform:** Windows 2000, XP and 2003

1. Open Printers and Faxes
2. Right-click the printer for which you want to change settings, and then click **Properties**
3. Clear **Enable bidirectional support** and click **Add port**, and then click Standard TCP/IP Port from the dropdown and click **New port**.
4. The "**Add Standard TCP/IP Printer Port Wizard**" will pop up and click **Next**.
5. In the **Printer Name or IP Address** box, type host name of the MFP server (default: FPS-3003) or IP address of MFP server. In the **Port Name** box, type **USB1\_RAW** or **USB2\_RAW** for printer connected to USB1 port and USB2 port, respectively.

*✎ If your server is running on a different LAN than your Windows PC such as wireless Windows PC, you must type server's IP address in **Printer Name or IP Address** box.*

6. Click **Next**.
7. Click **Custom/settings**.
8. The click Settings and confirm that the settings are as below. The default Port Number values are 9100, 9101 for USB port 1 and USB port 2, respectively. Refer to server's web pages or LevelOne MFP Control Center tool, you can get exact values.



**Configure Standard TCP/IP Port Monitor**

Port Settings

Port Name: USB1 raw

Printer Name or IP Address: FPS-3003

Protocol:

Raw  LPR

Raw Settings:

Port Number: 9100

LPR Settings:

Queue Name:

LPR Byte Counting Enabled


SNMP Status Enabled

Community Name: public

SNMP Device Index: 1

OK Cancel

9. Click **OK** and then **Finish**.



**Add Standard TCP/IP Printer Port Wizard**

Completing the Add Standard TCP/IP Printer Port Wizard

You have selected a port with the following characteristics.

SNMP: No

Protocol: RAW, Port 9100

Device: FPS-3003

Port Name: USB1\_RAW

Adapter Type:

To complete this wizard, click Finish.

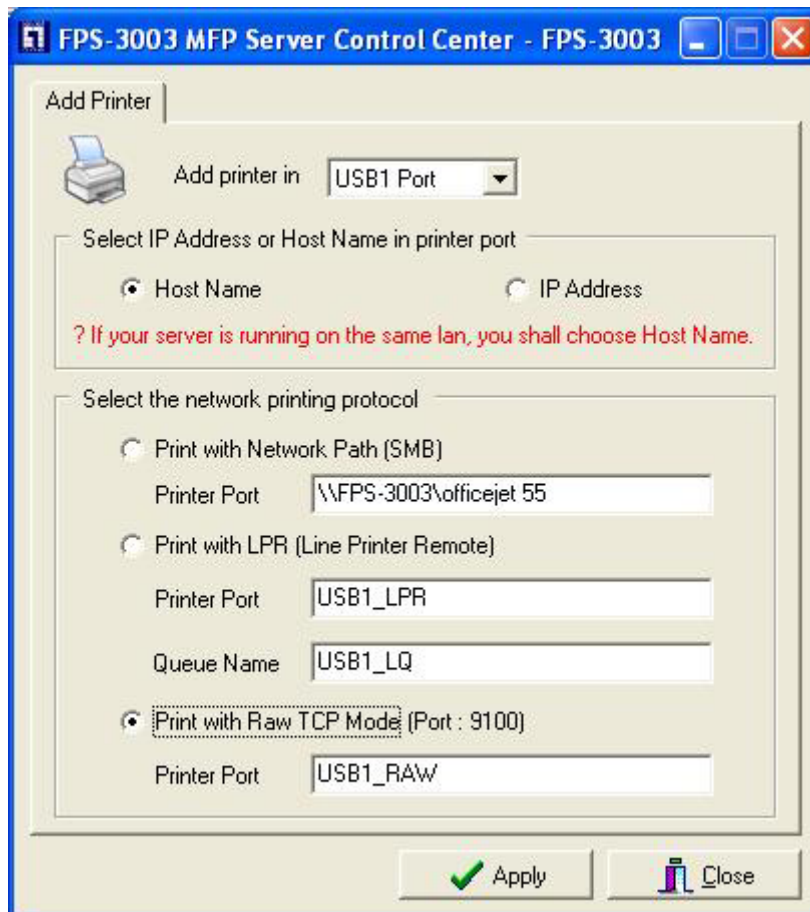
< Back Finish Cancel

## 4.4.6 Using LevelOne MFP Control Center for Raw TCP

### Printing

**Windows Platform:** Windows 2000, XP and 2003

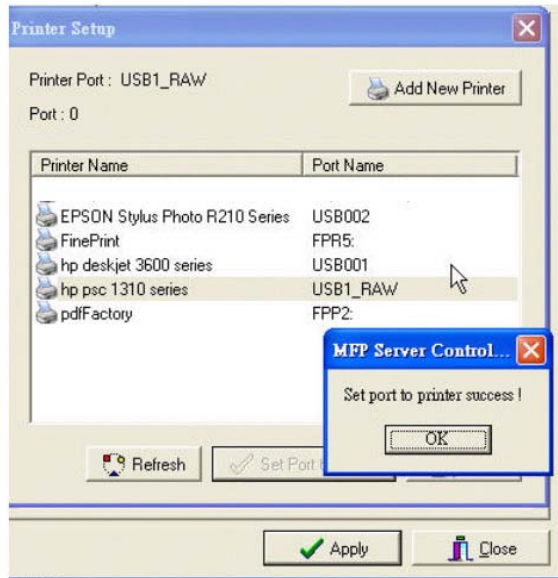
1. Start LevelOne MFP Control Center, select your MFP server and click **Add Printer**.
2. Select USB1 Port or USB2 Port to add the printer in **Add the printer** box, choose to use or IP address to represent MFP server in **Select IP Address or Host Name in printer port** box, and select the network printing protocol of **Print with Raw TCP Mode**.



*✎ If your server is running on a different LAN than your Windows PC such as wireless Windows PC, you must choose IP address in **Select IP Address or Host Name in printer***

**port box.**

3. Click **Apply**.
4. Select the desired printer driver and click **Set Port to Printer**.

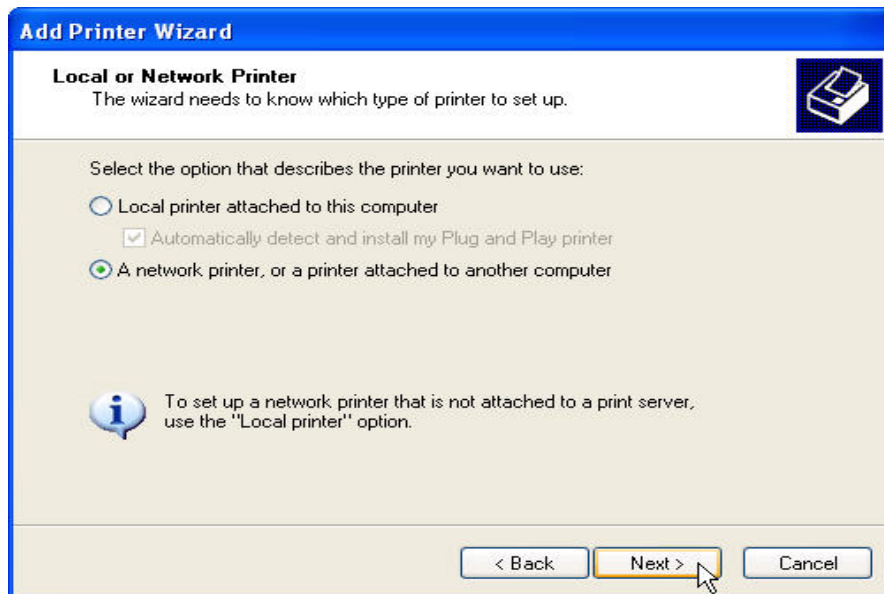


5. If you can not find any printer driver in Printer List, please install your printer driver first or click **Add New Printer** to install the printer driver.

#### **4.4.7 Using Standard Windows Method for IPP Printing**

**Windows Platform:** Windows 98 SE, ME, 2000, XP and 2003

1. Click Start, click **Control Panel**, click Printers and Other Hardware, and then click Printers and Faxes.
2. Double click Add Printer to start the Add Printer Wizard, and then click Next.
3. In this window, select A network printer, or a printer attached to another computer and click Next.



4. Click the **Next** button. On the next window, select Connect to a printer on the Internet or on a home or office network. In the URL: field, enter the following to connect to MFP server: *http://server's host name /printer name* or *http://server's IP address /printer name*  
For example, *http://FPS-3003/psc 1310 ser*  
  
*✎ If your server is running on a different LAN than your windows PC such as wireless Windows PC, you must type IP address in **URL: Field**.*
5. Click Next and then continue Windows Add Printer Wizard.



# Chapter5 Adding Printers in Unix/Linux

This chapter describes how to add network printers to Unix/Linux PC.

## 5.1 Configuring Host File

If using IP administration system like DNS, manually registering the host name and IP address may be not required. Otherwise, you have to edit hosts file and contact your network administrator.

1. Log in to Linux machine by "root".  
*# login root*
2. Register FPS-3003 MFP server's host name and IP address to /etc/hosts file.  
*To edit host file, use an editor, e.g. "vi".*  
**Example:** The IP address is "192.168.1.100", host name is "FPS-3003"  
192.168.1.1 dns # DNS Server  
192.168.1.2 mail # Mail Server  
192.168.1.100 FPS-3003 # MFP-Server
3. Switch on the MFP server. Verify the network connection by using ping command.  
*# ping FPS-3003*  
If there is no response or error is indicated, there may be problems with IP address configuration, host file editing or network status. Please contact your network administrator.

## 5.2 Printing by LPD/LPR

This section explains how to print using LPD protocol of TCP/IP. For further information on "lpr" and "lp" commands, refer to your workstation manual.

**LPD Protocol:** LPD (Line Printer Daemon) is a protocol that enables you to execute printing to a printer on the network.

**Remote-Printer Queue:** FPS-3003 has two remote printer queues USB1\_LQ and USB2\_LQ with respect to USB port 1 and UB port2. To print files using a printer driver, use "lp" or "lpr".

### 5.3 Using FPS-3003 on BSD UNIX/Linux

1. Log in to the BSD Unix machine through "root".

```
# login root
```

2. Register the FPS-3003 MFP server to /etc/printcap file.

Example: To register the printer of USB1 port by the printer name "Printer1".

```
Printer1:\ ---(A)
        :lp=:rm=FPS-3003:rp=USB1_LQ:\ ---(B)
        :sd=/var/spool/lpd/Printer1:\ ---(C)
        :lf=/var/spool/lpd/Printer1/Printer1_errs: ---(D)
```

where

(A) Describes the printer name.

(B) lp: Device file name to connect printer. No name designation required on the network.

rm: Host name for the remote printer. Type the host name registered to /etc/hosts file.

rp: Remote printer name. Please input the remote printer queue name.

(C) sd: Spool directory name. It must be the absolute path.

(D) lf: Error log file name. It must be the absolute path.

3. Create the spool directory and error log file registered to /etc/printcap file.

Example: To create the spool directory "Printer1" and error log file "Printer1\_errs".

```
# mkdir /var/spool/lpd/Printer1 Create the spool directory
# touch /var/spool/lpd/Printer1/Printer1_errs Create the error
log file
# chown -R daemon /var/spool/lpd/Printer1 Change the owner
to daemon
# chgrp -R daemon /var/spool/lpd/Printer1 Change the group
to daemon
```

4. Start Printing.

A. Use the "lp" command.

```
-# lp -d Printer1 <Print file name>
-# lp -d Printer2 <Print file name>
```

B. Use the "lpr" command.

```
-# lpr -P Printer1 <print file name>  
-# lpr -P Printer2 <Print file name>
```

## 5.4 Using RedHat Linux Printer System Manager

In the RedHat x-window user interface, do the steps as follows:

1. Form the **Start** menu, choose **Programs -> Administration -> Click Printer Tool**. Windows will display the RHS Linux Print System Manager folder.
2. Click on the **ADD** button in the RHS Linux Print System Manager folder. Windows will display the **Add a Printer Entry** folder.
3. You will now be asked to specify which Printer type you are using, select the "Remote Unix (lpd) Queue" option.
4. Click the **OK** button. Windows will display the **Under Edit Remote Unix(lpd) queue Entry** folder
5. In the **Under Edit Remote Unix(lpd) queue Entry** folder, enter values for the fields as follows:
  - Input Names (name1[name2]\*): **Printer1** or **Printer2** (any name)
  - Spool Directory: /var/spool/lpd/Printer1 or Printer2
  - File Limit in Kb (0=no limit): 0
  - Remote Host: **FPS-3003** or **IP address of MFP server**
  - Remote Queue: **USB1\_LQ** or **USB2\_LQ**
  - Input Filter [select] : select the printer driver
6. Click **OK**. In the **RHS Linux Print System Manager** folder, select **Tests** in the menu bar.
7. Start printing:
  - A. Use the "lp" command.
    - # lp -d Printer1 <Print file name>
    - # lp -d Printer2 <Print file name>

B. Use the "lpr" command.

- # *lpr -P Printer1 <print file name>*
- # *lpr -P Printer2 <Print file name>*

## Chapter6 File Server Function

This chapter describes the file server function of FPS-3003 MFP server which allows USB storage devices to be shared across a network by using SMB: NetBIOS over TCP/IP and FTP protocol.

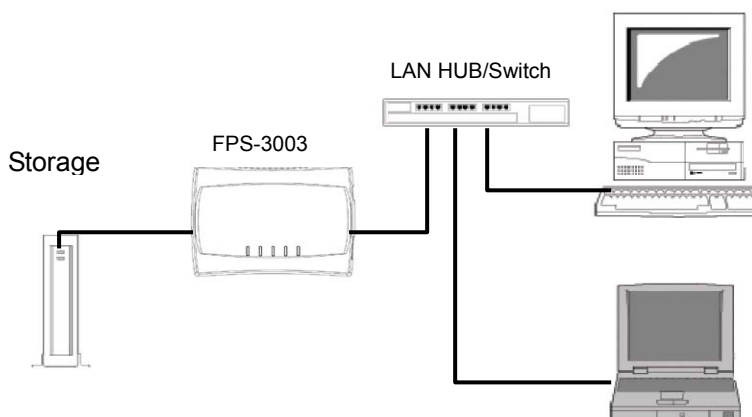
### 6.1 Preliminary

1. This product supports a file format of FAT12/16/32. It will not support a drive formatted by NTFS, etc.
2. LevelOne technology is not responsible for the loss or corruption of data in memory devices, including hard disk; LevelOne is not responsible for the leak, manipulation, loss, or corruption of data in memory devices connected to MFP server after unauthorized access.
3. In order to use the USB Mass Storage device connected to the MFP server, the SMB protocol or FTP protocol must be set up.
4. This product does not support to magnet optical drive devices such as CD/DVD.
5. This product allows shared two USB storage devices over the network in Windows through the USB ports.
6. This product does not support the USB devices through USB hub.

### 6.2 Storage Names

The local drives of the two storages in USB1 port and USB2 port are named as USBx\_DxPx, where USBx represents the USBx port, Dx represents the the x-th Disk and Px represents the x-th partition.

### 6.3 Connecting USB Mass Storage to FPS-3003



## 6.4 Supported Code Pages

### - What is codepage?

Used by the system to encode and interpret string characters. Codepage formats are not the same for each language. Some languages, such as Japanese have multibyte characters, while others, such as English and German, need only one byte to represent each character.

### - Filename Encoding of FAT File System

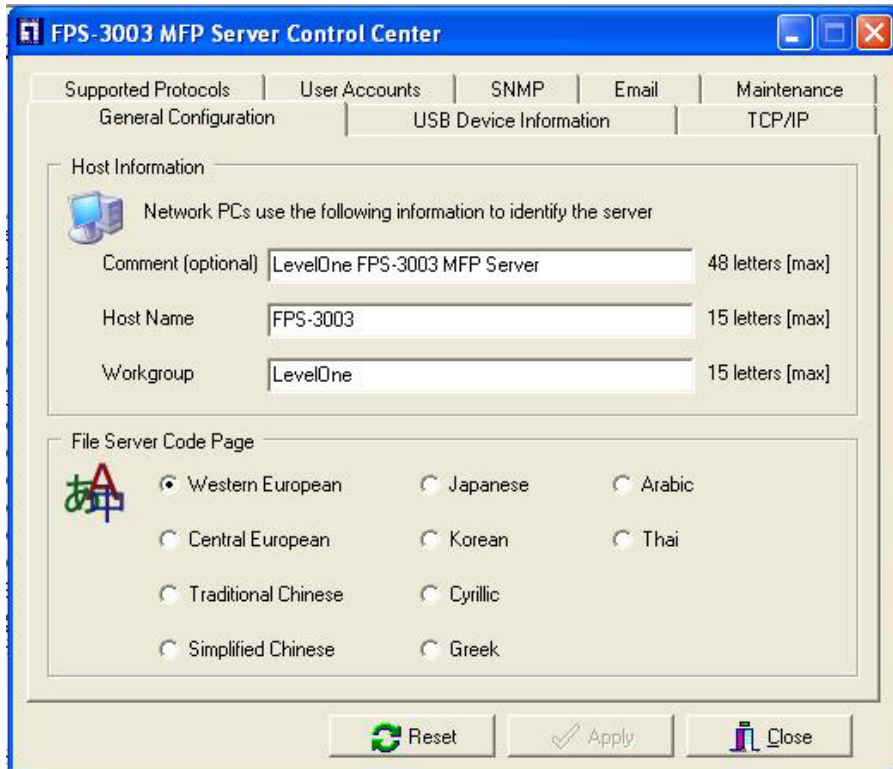
This is known as an 8.3 file name, a short file name using code page encoding. The FAT file system also supports file names that can be up to 255 characters long. This is known as a long file name using Unicode (UTF-16) encoding.

### - Configuring FPS-3003 Codepages

MFP Server supports Windows Codepages. If users want to communicate files with FPS-3003 MFP server, they have to set their MFP server code page to be same as the codepage that their Windows PC is using. Users can use the following methods to set MFP server codepage.

#### i. Using LevelOne MFP Control Center

1. Start LevelOne MFP Control Center and Auto-searching MFP server window will appear.
2. If the tool finds MFP servers in your local area network, then you have to select a MFP server from the server list.
3. Double click the highlight list and type the server's administrator (default: *admin*) and password (default: *admin*).
4. After you login successfully, setting **General Configuration** dialog appears.



5. Select your code page form **File Server Code Page** box and click **Apply**.
- ii. Using Server's Web Pages
  1. Go to the web page, click **Config** -> **General Configuration** icon.
  2. Login your administrator (default: *admin*) and password (default: *admin*).
  3. After you login successfully, setting **General Configuration** dialog appears.

## Set General Configuration

Host Information		
Comment (optional)	<input type="text" value="LevelOne FPS-3003 MF"/>	48 letters[max.]
Host Name	<input type="text" value="FPS-3003"/>	15 letters[max.]
Workgroup	<input type="text" value="LevelOne"/>	15 letters[max.]

File Server Code Page
<input checked="" type="radio"/> Western European
<input type="radio"/> Central European
<input type="radio"/> Traditional Chinese
<input type="radio"/> Simplified Chinese
<input type="radio"/> Japanese
<input type="radio"/> Korean
<input type="radio"/> Cyrillic
<input type="radio"/> Greek
<input type="radio"/> Arabic
<input type="radio"/> Thai

\* Built-in codepages use MS Windows series codepages.

4. Select your code page form **File Server Code Page** box and click **Apply**.

## 6.5 Sharing Your USB Mass Storages

You can use the following protocols to share your USB Mass Storages in network:

- SMB: NetBIOS over TCP/IP
- FTP

✎ Prior to using the above protocols, you must select **Enable SMB Print/File Server** and **Enable FTP Server** options in **Set Supported Protocols** box.

### 6.5.1 Use Shared Storages by SMB Method for Windows

1. Connect a USB storage device to this product.
2. Select **My Network Places**
3. Click **Display the Computers of Workgroup**
4. Double click **Microsoft Windows Network** icon.
5. Double click the **Workgroup** that MFP server belongs to. The default Workgroup name is "LevelOne". You can refer to



LevelOne MFP Control Center or server's web pages to get it. You will see that the MFP server will be displayed as the default host name "FPS-3003" or the host name that you have set.

6. If you can not find Workgroup name of MFP server in Microsoft Windows Network, you can select **Search Computer** in **My Network Places** and type the hostname of MFP server (ex, default host name "FPS-3003" ) to find it.
7. Double click this host name icon. The folders will be displayed as USB1\_DxPx, and USB2\_DxPx where Dx represents the x-th disk and Px represents the x-th partition with respect to USB1 port and USB2 port.
8. Double click the one of folders to open the folders over the network.

### 6.5.2 Use Shared Storage by FTP Methods for Windows

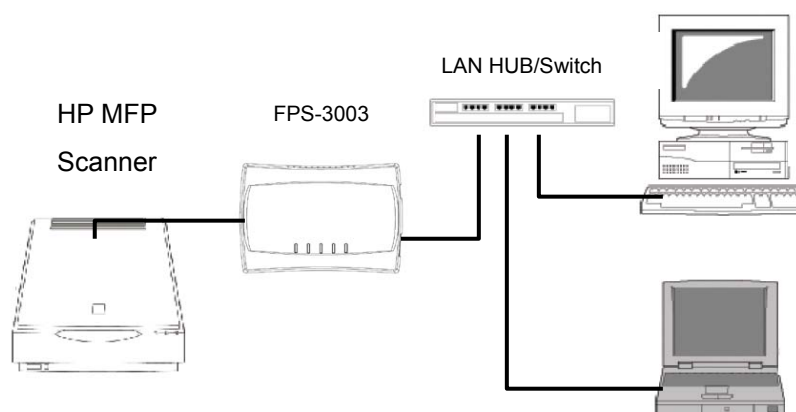
- i. Use Microsoft IE to the shared USB Mass Storages
  1. Open Microsoft IE
  2. In **Web Address List**, type command: "ftp://server's host name" or "ftp://server's IP address". If you have changed the default FTP port : 21 to the new value, you have to add the new port number in the tail of command as "ftp://server's host name: ftp port" or "ftp://server's IP address: ftp port"
  3. If you clear **Enable FTP Authentication in Set Supported protocols**, you login to the FTP server as anonymous login; otherwise you have to type user name and password to login to the server.
  4. The shared folders will be listed in IE.
  5. Perform Paste, Remove or Copy the files to the shared folders.
- ii. Use Microsoft Dos's FTP client
  1. Type Dos command as "ftp"
  2. Type "open server's host name" or "open server's IP address". If you have changed the default FTP port : 21 to the new value, you have to add the new port number in the tail of command as "open server's host name ftp port" or "open server's IP address ftp port"

3. If you clear **Enable FTP Authentication in Set Supported protocols**, you login to the FTP server as anonymous login; otherwise you have to type user name and password to login to the server.
4. Perform FTP commands to use this FTP server.

## Chapter7 Scan Server Function

This chapter explains how to use the scan server function of this product. The scan server function enables a USB scanner of HP OJ series, connected to this product, to be shared as a network scanner. The scan server function is available in any platform that can use SANE client.

### 7.1 Connecting HP Office Jets to MFP Server



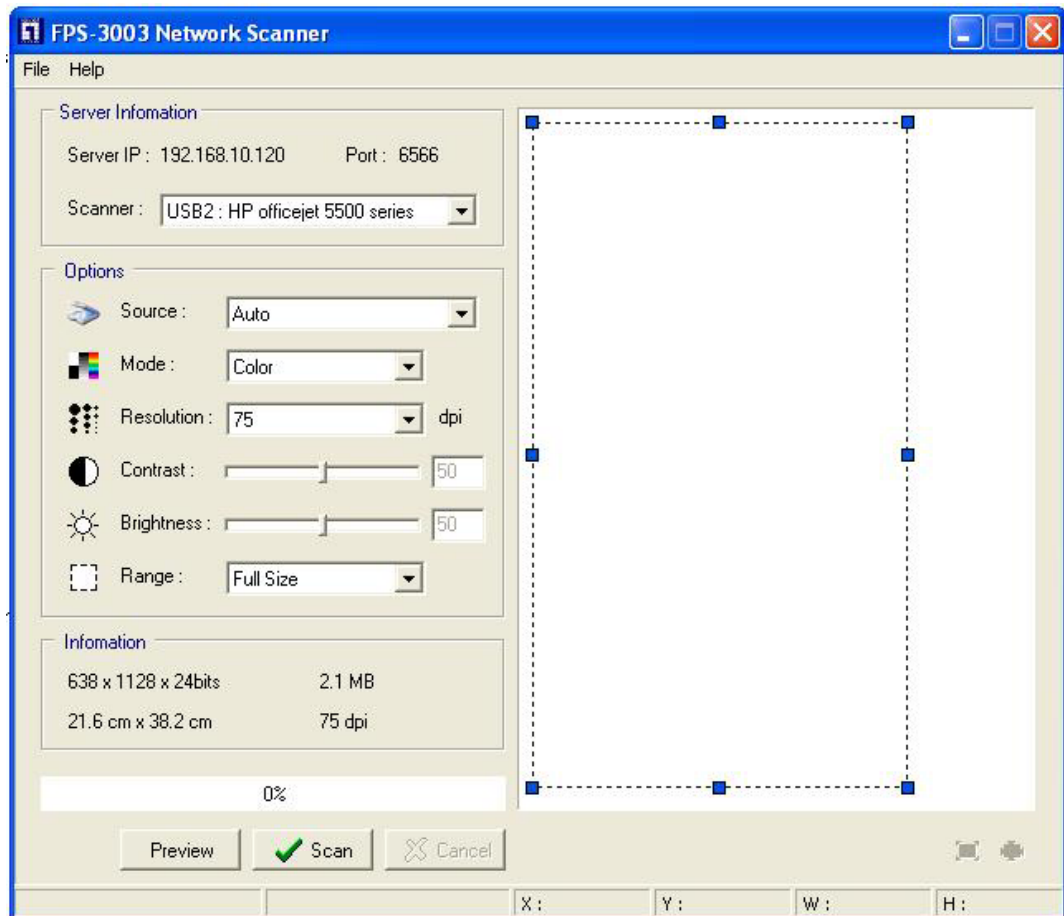
### 7.2 Using the Shared Scanner in Windows

#### 7.2.1 Using LevelOne MFP Control Center Tool

1. Start LevelOne MFP Control Center, select your MFP server, and click LevelOne Network Scanner.



2. Select your scanner for USB1 port or USB2 port.



3. Set the options. The options are defined as follows:

- **Source:** choose flatbed scanning or scrolledbed scanning
- **Mode:** choose lineart (black/white), Gray and color mode
- **Resolution:** choose the image resolution
- **Contrast:** tune the contrast of the image
- **Brightness:** tune brightness of the image
- **Range:** define the scanning range of the image

4. Click **Preview** button

5. Adjust the window size to be scanned

6. Click **Scan** button

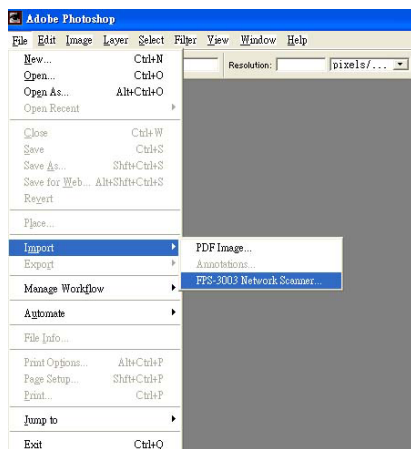
7. Save as your images to the file


## 7.2.2 Using Windows Applications

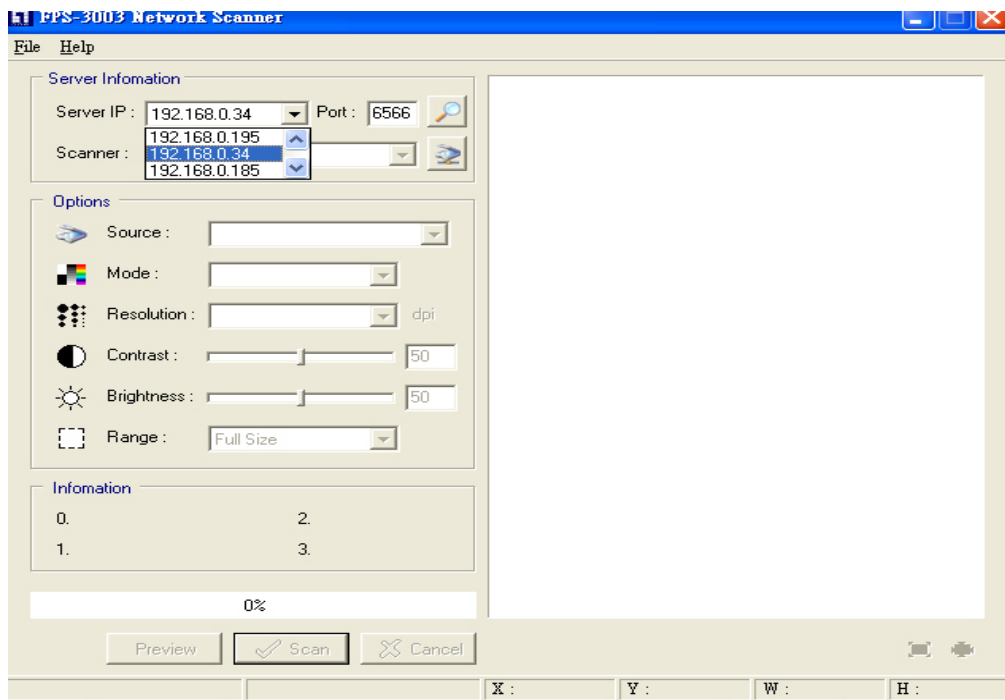
Prior to using scanning functions in Windows applications such as MS Word, Photoshop ...etc, you have to install network scanner's TWAIN driver in advance. When you install LevelOne MFP Control Center tool, it will also install this TWAIN driver.

### Example: Using Photoshop

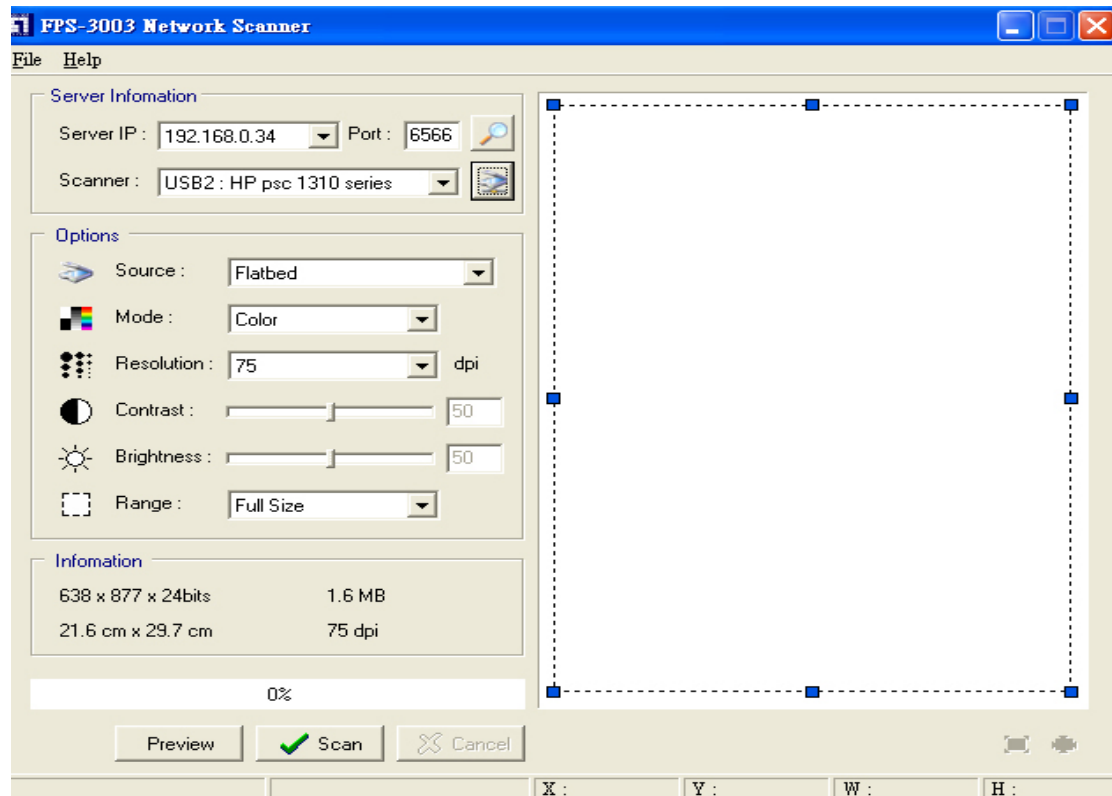
1. Start **Photoshop**, click **File ->Import->FPS-3003 Network Scanner**



2. Select a server's IP address or type a server IP address in **Server Information** box. You can click **Search Server** button  to search existing MFP servers in your network.



3. Click **Connect to Network Scanner** button  in **Server Information** box



4. Select your scanner in **Server Information** box.
5. Click **Preview** button
6. Adjust the window size to be scanned
7. Click **Scan** button

## Chapter8 LevelOne MFP Control Center

This chapter describes how to use LevelOne MFP Control Center in your Windows.

### 8.1 Installing Your LevelOne MFP Control Center

1. Click **Install Product** button.









2. Click **Next**, if you see **Next** button in installation windows.
3. Click **Finish**.

### 8.2 Using LevelOne MFP Control Center

#### 8.2.1 Use Tools of MFP Control Center

You can use the following tools to help you using the MFP server:

- *Auto Search* : renew to auto search the existing MFP servers in network
- *IP Search* : search the MFP server by IP address
- *Refresh* : refresh the highlight list's server status
- *Go to web* : go to web pages of the highlight list's server
- *Network Scanning* : perform network scanner function of the highlight list's server

- **Add Printer** : perform add printer function of the highlight list's server

## 8.2.2 Display Server's Status

You can start LevelOne MFP Control Center and select your MFP server to see the server status which includes Host Information, TCP/IP, USB Devices Status and Supported Protocols.

## 8.2.3 Set up Server's Configuration

### ■ General Configuration

- ◆ **Set Host Information:** You have to set some information for networking using SMB protocol:
  - Comment:* optionally set to describe the server
  - Host Name:* the name to represent the server for Windows networking using SMB protocol
  - Workgroup:* the SMB workgroup name that the server belongs to.
- ◆ **File Server Code Page:** You have to select your code page while operating network file sharing. Generally, the criteria of choosing code page are based on your Windows code page. For example, if your Windows code page is Traditional Chinese, you have to select Traditional Chinese (Big5) in server. Please refer to Chapter 6 File Server Function.

- **USB Device Information:** You can set printer names and display some information of USB mass storages and scanners. Please refer to Chapter 4, Chapter 6 and Chapter 7.

- **TCP/IP:** You have to set the server's TCP/IP configuration to connect TCP/IP network. Please see Chapter 3 Basic Installation for more details.

- **Supported Protocols:** The server supports the following TCP/IP protocols:

- ◆ **TCP/IP**

- Enable LPR (Line Printer Remote) Printing:* select or

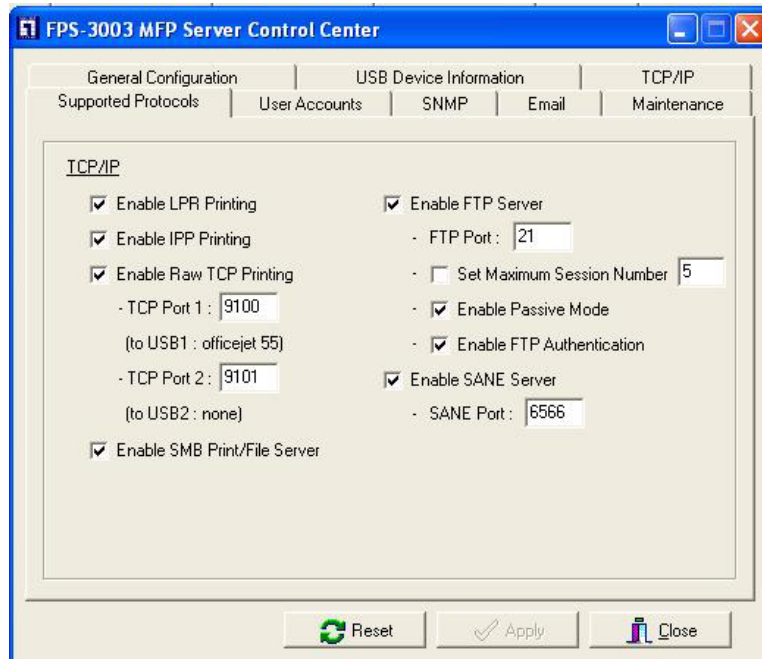


clear **Enable LPR Printing** support. It is enabled in Factory Default.

- ☑ *Enable IPP Printing:* select or clear **Enable IPP Printing** support. It is enabled in Factory Default.
- ☑ *Enable Raw TCP Printing:* select or clear **Enable Raw TCP Printing** support. It is enabled in Factory Default and users may set the protocol's TCP ports as following boxes:
  - *TCP Port 1:* set TCP port for the printer of USB1 port (default: 9100)
  - *TCP Port 2:* set TCP port for the printer of USB2 port (default: 9101)
- ☑ *Enable SMB (Server Message Block) Print/File Server:* select or clear **Enable SMB Print/File Server** support. It is enabled in Factory Default.
- ☑ *Enable FTP Server:* select or clear **Enable FTP Server** support. It is enabled in Factory Default and users may set some parameters as follows:
  - *FTP Port:* type an integer number to set FTP server's TCP port (default: 21)
  - *Set Maximum Session Number:* select or clear **Set Maximum Session Number** support. You can limit the FTP session number by selecting the support and type an integer to set the allowable maximum session number. If you clear the support, it means that FTP server will have not any limitation in session number.
  - *Set Passive Mode:* select or clear **Set Passive Mode** support that FTP server can accept passive mode.
  - *Enable FTP Authentication:* select or clear **Enable FTP Authentication** support. If you select the support, you need to type user name and password to login to the server. If you clear the support, you enter the server as anonymous login.
- ☑ *Enable SANE (Scanner Access Now Easy) Server:* select or clear **Enable SANE Server** support. It is enabled in Factory Default and users may set the

TCP port as follows:

- *SANE Port*: set SANE server's TCP port (default: 6566)



- **User Accounts:** You can change administrator name and password or add a FTP account. If you forgot administrator name and password, you must to perform Restore Factory Default action by pressing Init button and plugging Power adaptor simultaneously. Please refer to Chapter 13 Restore Factory Default.
  - ◆ **Set Administrator**
    - ☑ *New Administrator:* type your desired administrator name.
    - ☑ *New Password:* type your desired password.
    - ☑ *Retype Password:* confirm your previous password typing.
  - ◆ **User Accounts list**
    - ☑ *User name:* Administrator can add a new FTP user account for accessing the storage attached to FPS-3003.
    - ☑ *Password:* After entering the user name and corresponding password, click "Add". The account will take effect once shown in the blank below.



- **SNMP:** You can set community and some parameters for SNMP server. Furthermore, you can enable SNMP v3 for more security.

- ◆ **Set SNMP Configuration**

- ☑ *Authentic Community:* set Community name of SNMP server.
- ☑ *Trap Community:* set Trap Community name for SNMP server to send trap packets.
- ☑ *Trap Address:* type an IP address to send the Trap packet.
- ☑ *SysContact:* type some letters for variable of *SysContact* that represents the name of system contact.
- ☑ *SysName:* type some letters for variable of *SysName* that represents the name of system.
- ☑ *SysLocation:* type some letters for variable of *SysLocation* that represents the location of system.
- ☑ *EnableAuthenTrap:* type 1 or 2 for the variable of *EnableAuthenTrap* that represents to enable (1) or disable (2) to send Trap packets receiving the wrong Community name.

- ◆ **SNMP V3**

- ☑ *Enable SNMP V3:* select or clear **Enable Snpv3** support
- ☑ *User Security name:* set user security name of SNMP v3
- ☑ *Auth Password:* set authentication password of SNMP v3.
- ☑ *Privacy Password:* set privacy password of SNMP v3.

The screenshot shows the 'FPS-3003 MFP Server Control Center' window. The 'SNMP' tab is selected, displaying the following configuration fields:

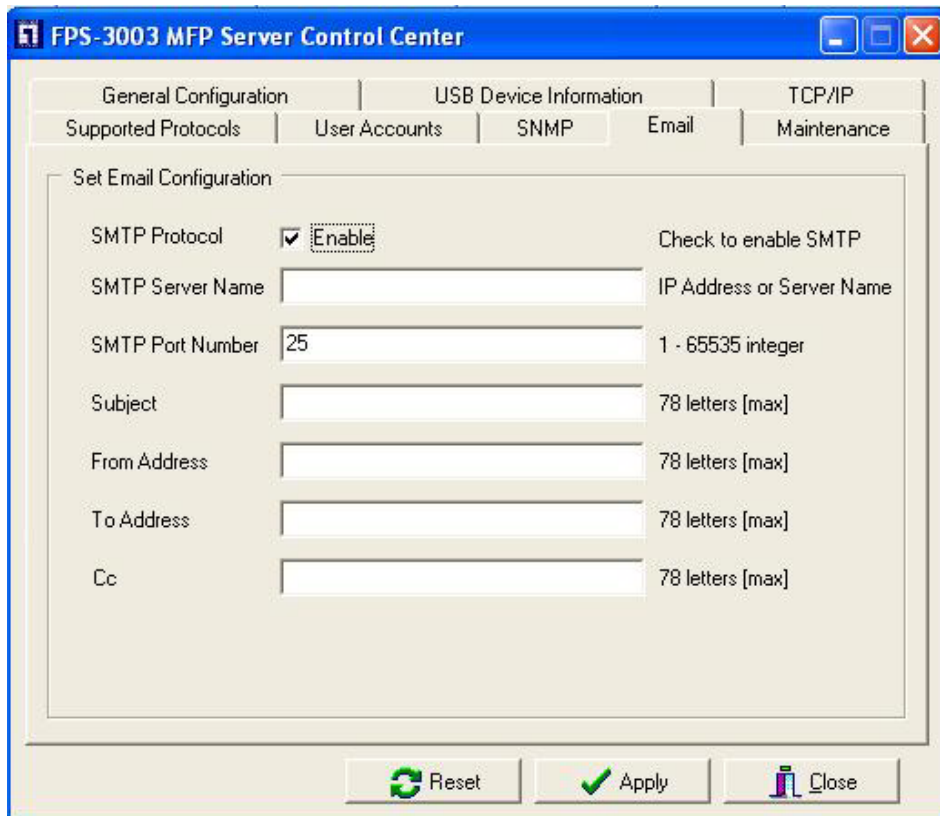
Field	Value	Constraint
Authentic Community	public	15 letters [max] (Password)
Trap Community	public	15 letters [max]
Trap Address (IP)	0.0.0.0	IP Address
SysContact	support@ddcasia.com.tw	60 letters [max]
SysName	LevelOne FPS-3003 MFP Server	60 letters [max]
SysLocation	www.level1.com	120 letters [max]
EnableAuthenTrap	2	1 : Enable, 2 : Disable

Below the main configuration fields, there is a section for 'Enable SNMPv3' which is currently unchecked. It includes three password fields:

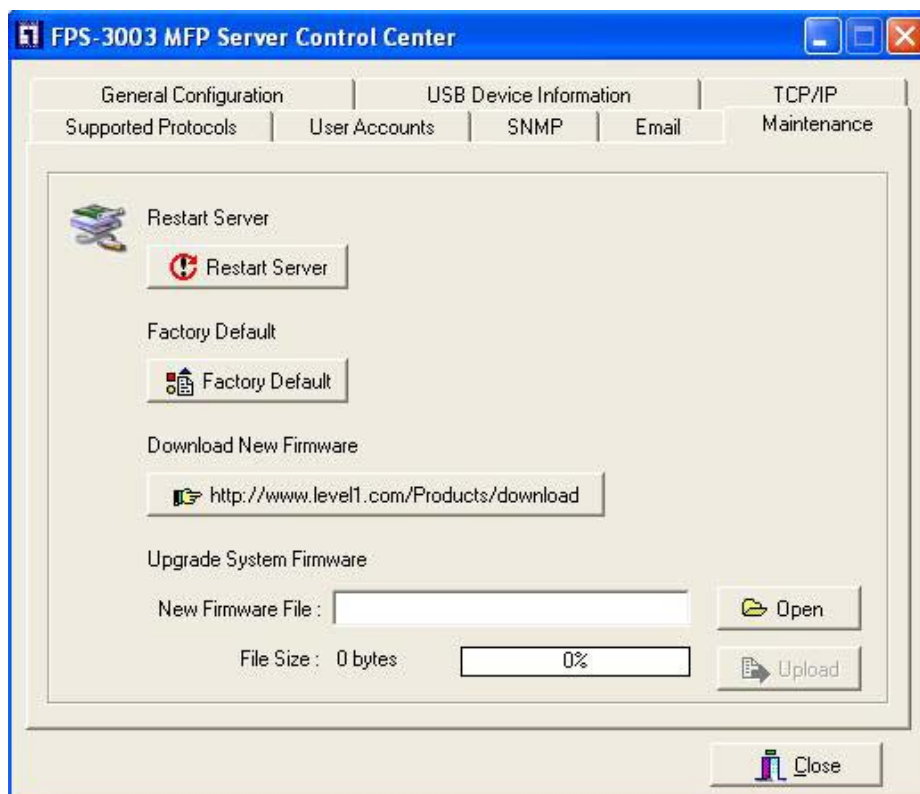
Field	Constraint
User Security Name	8 - 15 letters
Auth Password	8 - 15 letters
Privacy Password	8 - 15 letters

At the bottom of the window, there are three buttons: 'Reset', 'Apply', and 'Close'.

- **Email:** If you want to receive some alerting mail from the server, you have to enable SMTP Protocol, and set Email configuration. You can set new SMTP port number (default: 25).
  - ◆ **Set Email Configuration**
    - ☑ *SMTP Protocol:* select or clear **Enable** SMTP support
    - ☑ *SMTP Server Name:* type your SMTP server's host name or IP address.
    - ☑ *SMTP Port Number:* set new SMTP server's TCP port number (default: 25).
    - ☑ *Subject:* type the subject of the e-mail.
    - ☑ *From Address:* type the sender's e-mail address
    - ☑ *To Address:* type an e-mail address to send that mail to a person
    - ☑ *Cc:* stands for carbon copy; type an e-mail address to send that mail to a second person



- **Maintenance:** If you want to restart server, restore factory default values of the server, download new firmware file from product's public web site and upgrade new firmware, you can use the Maintenance tool.
  - ◆ **Restart Server:** click the button, the server will be restarted.
  - ◆ **Factory Default:** click the button, the server will restore factory default values.
  - ◆ **Download New Firmware:** click the button and you can download new firmware or user software from product's public web site.
  - ◆ **Upgrade New Firmware:** click **Open** to find the system firmware file to be upgraded. Click **Upgrade** to do the real firmware upgrading task.



# Chapter 9 MFP Server's Web Pages

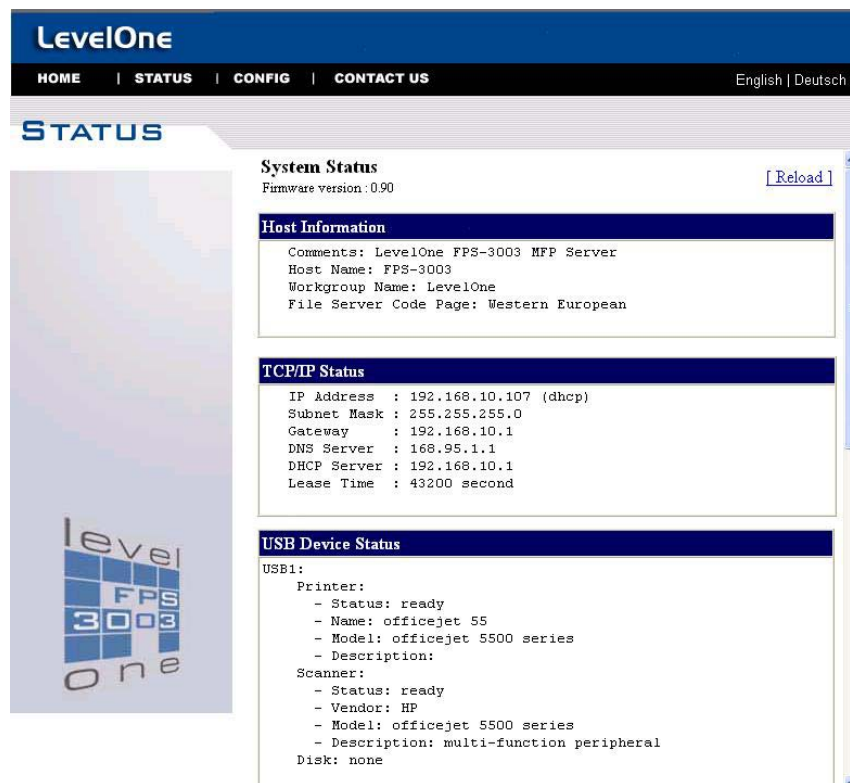
## 9.1 Introduction

FPS-3003 USB MFP server runs the daemon of http server, *httpd* on TCP port: 80. Users may use the web pages to see the server's system status and configure the server.

## 9.2 Using Server's Web Pages

### 9.2.1 Display Server Status

You can see the status of Host Information, TCP/IP and USB devices.



The screenshot shows the web interface for the LevelOne FPS-3003 MFP server. The page has a blue header with the 'LevelOne' logo and navigation links for HOME, STATUS, CONFIG, and CONTACT US. The main content area is titled 'STATUS' and contains several sections: 'System Status' (Firmware version: 0.90), 'Host Information' (Comments, Host Name, Workgroup Name, File Server Code Page), 'TCP/IP Status' (IP Address, Subnet Mask, Gateway, DNS Server, DHCP Server, Lease Time), and 'USB Device Status' (Printer and Scanner details). A vertical sidebar on the left features a large 'level one' logo with 'FPS 3003' in the center.

System Status
Firmware version : 0.90

Host Information
Comments: LevelOne FPS-3003 MFP Server
Host Name: FPS-3003
Workgroup Name: LevelOne
File Server Code Page: Western European

TCP/IP Status
IP Address : 192.168.10.107 (dhcp)
Subnet Mask : 255.255.255.0
Gateway : 192.168.10.1
DNS Server : 168.95.1.1
DHCP Server : 192.168.10.1
Lease Time : 43200 second

USB Device Status
USB1:
Printer:
- Status: ready
- Name: officejet 55
- Model: officejet 5500 series
- Description:
Scanner:
- Status: ready
- Vendor: HP
- Model: officejet 5500 series
- Description: multi-function peripheral
Disk: none

## 9.2.2 Set up Server Configuration

To set up the server configuration, the system will request user to enter administrator (default: *admin*) and password (default: *admin*) to login.

### ■ General Configuration

- ◆ **Set Host Information:** You have to set some information for networking using SMB protocol:
  - Comment:* optionally set to describe the server
  - Host Name:* the name to represent the server for Windows networking using SMB protocol
  - Workgroup:* the SMB workgroup name that the server belongs to.
- ◆ **File Server Code Page:** You have to select your code page while operating network file sharing. Generally, the criteria of choosing code page are based on your Windows code page. For example, if your Windows code page is Traditional Chinese, you have to select Traditional Chinese (Big5) in server. Please refer to Chapter 6 File Server Function.

#### Set General Configuration

Host Information		
Comment (optional)	<input type="text" value="LevelOne FPS-3003 MF"/>	48 letters[max.]
Host Name	<input type="text" value="FPS-3003"/>	15 letters[max.]
Workgroup	<input type="text" value="LevelOne"/>	15 letters[max.]

File Server Code Page
<input checked="" type="radio"/> Western European
<input type="radio"/> Central European
<input type="radio"/> Traditional Chinese
<input type="radio"/> Simplified Chinese
<input type="radio"/> Japanese
<input type="radio"/> Korean
<input type="radio"/> Cyrillic
<input type="radio"/> Greek
<input type="radio"/> Arabic
<input type="radio"/> Thai

\* Built-in codepages use MS Windows series codepages.

Submit

Reset



- **USB Device Information:** You can set printer names and display some information of USB mass storages and scanners. Please refer to Chapter 4, Chapter 6 and Chapter 7.
  
- **TCP/IP:** You have to set the server's TCP/IP configuration to connect TCP/IP network. Please see Chapter 3 Basic Installation for more details.
  
- **Supported Protocols:** The server supports the following TCP/IP protocols:
  - ◆ **TCP/IP**
    - ☑ *Enable LPR (Line Printer Remote) Printing:* select or clear **Enable LPR Printing** support. It is enabled in Factory Default.
    - ☑ *Enable IPP Printing:* select or clear **Enable IPP Printing** support. It is enabled in Factory Default.
    - ☑ *Enable Raw TCP Printing:* select or clear **Enable Raw TCP Printing** support. It is enabled in Factory Default and users may set the protocol's TCP ports as following boxes:
      - *TCP Port 1:* set TCP port for the printer of USB1 port (default: 9100)
      - *TCP Port 2:* set TCP port for the printer of USB2 port (default: 9101)
    - ☑ *Enable SMB (Server Message Block) Print/File Server:* select or clear **Enable SMB Print/File Server** support. It is enabled in Factory Default.
    - ☑ *Enable FTP Server:* select or clear **Enable FTP Server** support. It is enabled in Factory Default and users may set some parameters as follows:
      - *FTP Port:* type an integer number to set FTP server's TCP port (default: 21)
      - *Set Maximum Session Number:* select or clear **Set Maximum Session Number** support. You can limit the FTP session number by selecting the support and type an integer to set the allowable maximum session number. If you clear the support, it means that FTP server will have not any limitation

in session number.

- *Set Passive Mode*: select or clear **Set Passive Mode** support that FTP server can accept passive mode.
  - *Enable FTP Authentication*: select or clear **Enable FTP Authentication** support. If you select the support, you need to type user name and password to login to the server. If you clear the support, you enter the server as anonymous login.
  - Enable SANE (Scanner Access Now Easy) Server*: select or clear **Enable SANE Server** support. It is enabled in Factory Default and users may set the TCP port as follows:
    - *SANE Port*: set SANE server's TCP port (default: 6566)
- **User Accounts**: You can change administrator name and password or add a FTP user account. If you forgot administrator name and password, you must to perform Restore Factory Default action by pressing Init button and plugging Power adaptor simultaneously. Please refer to Chapter 13 Restore Factory Default.
- ◆ **Set Administrator**
    - New Administrator*: type your desired administrator name.
    - New Password*: type your desired password.
    - Retype Password*: confirm your previous password typing.
  - ◆ **User Accounts list**
    - User name*: Administrator can add a new FTP user account for accessing the storage attached to FPS-3003.
    - Password*: After entering the user name and corresponding password, click "Add". The account will take effect once shown in the blank below.

## Set User Account

Set Administrator		Submit	Reset
New Administrator	<input type="text" value="admin"/>	15 letters [max]	
New Password	<input type="text"/>		
Retype Password	<input type="text"/>		

User Account List		Apply	Cancel	
UserName	<input type="text"/>	Password	<input type="text"/>	Add
User Name		Password		Delete
123		***		

\*Allows up to 25 user accounts.

- **SNMP:** You can set community and some parameters for SNMP server. Furthermore, you can enable SNMP v3 for more security.
  - ◆ **Set SNMP Configuration**
    - ☑ *Authentic Community:* set Community name of SNMP server.
    - ☑ *Trap Community:* set Trap Community name for SNMP server to send trap packets.
    - ☑ *Trap Address:* type an IP address to send the Trap packet.
    - ☑ *SysContact:* type some letters for variable of *SysContact* that represents the name of system contact.
    - ☑ *SysName:* type some letters for variable of *SysName* that represents the name of system.
    - ☑ *SysLocation:* type some letters for variable of *SysLocation* that represents the location of system.

- EnableAuthenTrap*: type 1 or 2 for the variable of *EnableAuthenTrap* that represents to enable (1) or disable (2) to send Trap packets receiving the wrong Community name.
- ◆ **SNMP V3**
  - Enable SNMP V3*: select or clear **Enable SnmpV3** support
  - User Security name*: set user security name of SNMP v3
  - Auth Password*: set authentication password of SNMP v3.
  - Privacy Password*: set privacy password of SNMP v3.

#### Set SNMP Configuration

Name	Value	Comment
Authentic Community	<input type="text" value="public"/>	15 letters [max.](Password)
Trap Community	<input type="text" value="public"/>	15 letters [max.]
Trap Address(IP)	<input type="text" value="0.0.0.0"/>	IP address
SysContact	<input type="text" value="support@ddcasia.com."/>	60 letters [max.]
SysName	<input type="text" value="LevelOne FPS-3003 MF"/>	60 letters [max.]
SysLocation	<input type="text" value="www.level1.com"/>	120 letters [max.]
EnableAuthenTrap	<input type="text" value="2"/>	1: Enable, 2: Disable
<b>■ Enable SNMP V3</b>		
User Security Name	<input type="text"/>	8 -15 letters
Auth Password	<input type="text"/>	8 -15 letters
Privacy Password	<input type="text"/>	8 -15 letters

- **Restart Server**: click the button, the server will be restarted.

## Restart this server?

This server will be disconnected from the network for a while until it has restarted successfully!

[Yes](#)

[No](#)

- **Maintenance** If you want to restore factory default values of the server and upgrade new firmware, you can use the Maintenance tool.
  - ☑ **Factory Default:** click the button, the server will restore factory default values.
  - ☑ **Download New Firmware from Web Site:** click the button and you can download new firmware or user software from product's public web site.
  - ☑ **Upgrade New Firmware:** click **Open** to find the system firmware file to be upgraded. Click **Upgrade** to do the real firmware upgrading task.

### **Maintenance**

[Factory Default](#)

[Download New Firmware](#)

[Upgrade Firmware](#)

## **Chapter 10      Email Alerting**

FPS-3003 USB MFP server can send some email messages to the user while the following events occurs

1. *Add/Remove USB device:* When add new USB device or remove current USB device, the server will send the mail to notify the user.
2. *System Error:* When there are some errors occur in the server, the server will send the mail to notify the user.

## **Chapter 11      SNMP**

FPS-3003 USB MFP server runs the daemon of SNMP server that supports the SNMP v1, v2c and v3 protocols (Simple Network Management Protocol). Users can use SNMP client software as actual management tool such as HP Openview to management your MFP server. The FPS-3003 MFP servers support all relevant parts of MIB-II and a private FPS-3003 MFP server MIB. You can set value of some MIB variables from the server's web pages or LevelOne MFP Control Center Tool.

## Chapter 12 Troubleshooting

This chapter provides useful information to help you resolve difficulties you may experience with your FPS-3003 USB MFP server. Fault symptoms, possible causes and remedial actions are provided within a quick reference table. General USB ports in FPS-3003 USB MFP server only support USB printers, USB Mass storages and USB scanner of HP Office Jet Series.

### 12.1 LED Indicators

Indicators	Color/Behavior	Description
Power	Orange	Power On
	Not lit	Power off/System error
Link	Green	Network connected
	Not Lit	No physical connection to network
Status	Green blinking	Activity on network
	Not lit	No activity on network
USB1	Green	USB device connected
	Green blinking	Connected USB device error
	Not lit	No physical connection to USB device
USB2	Green	USB device connected
	Green blinking	Connected USB device error
	Not lit	No physical connection to USB device

### USB Device Status

Devices	Status	Description
Printer	Ready	Printer is ready.
	Printing	Printer is printing.

	Out of paper	Printer is out of paper.
	Error	There are errors in network printing.
Mass Storage	Ready	Storage is ready.
	Error	There are errors in network File server.
Scanner	Ready	Scanner is ready.
	Flatbed Scanning	Flatbed of scanner is scanning.
	Scrollfed Scanning	Scrollfed of scanner is scanning.
	Error	There are errors in network scanning.



# Chapter13 Restore Factory Default

This chapter describes how to restore default parameters of the MFP server.

The server provides the following methods to achieve restoring default parameters of the MFP server.

## 13.1 Using Server's Web Pages

1. Go to the server's web page and click **Maintenance**
2. Login your administrator (default: *admin*) and password (default: *admin*).
3. Click **Factory Default**.

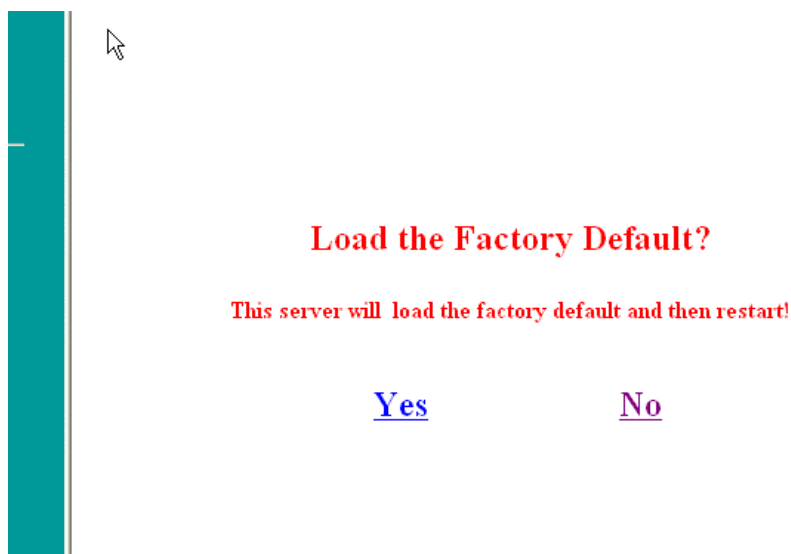
**Maintenance**

[Factory Default](#)

[Download New Firmware](#)

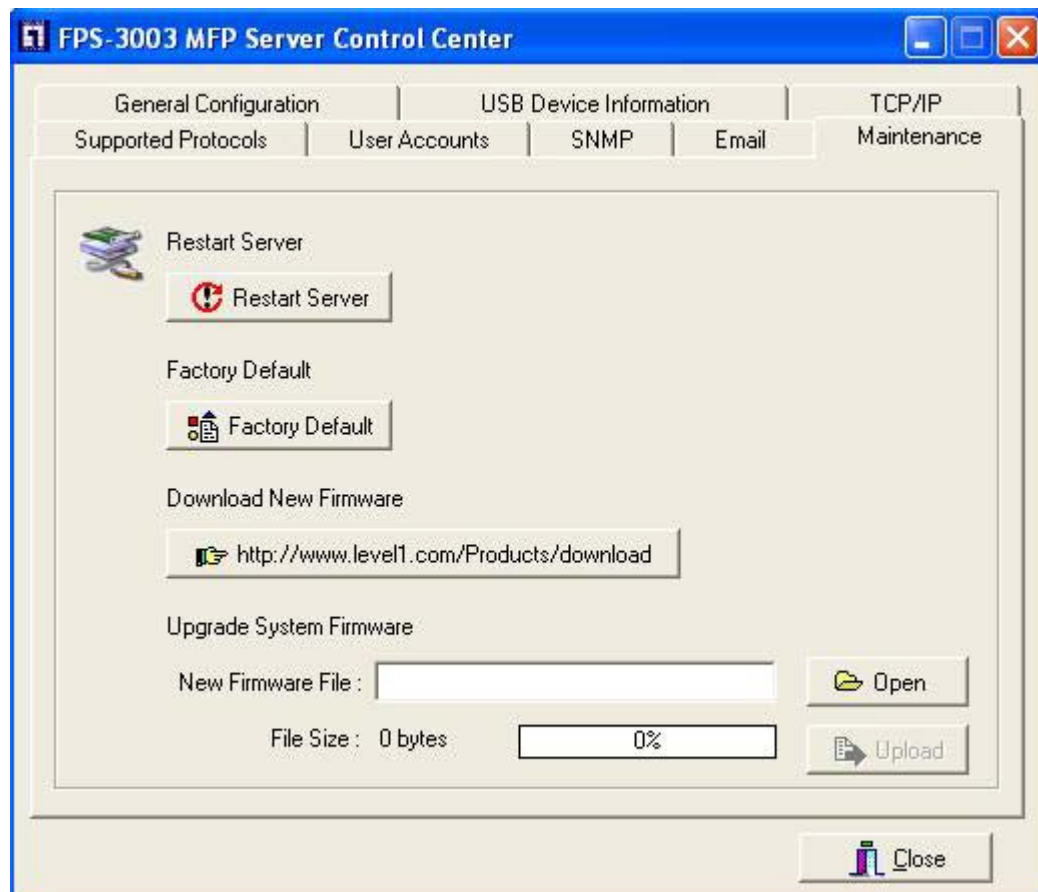
[Upgrade Firmware](#)

4. Click Yes to confirm your action



## 13.2 Using LevelOne MFP Control Center

1. Start LevelOne MFP Control Center and Auto-searching MFP server window will appear.
2. If the tool finds MFP servers in your local area network, then you have to select a MFP server from the server list.
3. Double click the highlight list and type the server's administrator (default: *admin*) and password (default: *admin*).
4. After you login successfully, from the Server menu, select **Maintenance**. The **Maintenance** dialog appears.
5. Click **Factory Default**.



## 13.3 Using Init Button

Simultaneously press Init button and power on (plug the power adaptor line) the server until LED indicators of Power, USB1 and USB2 blink. After that, the servers will operate using the Factory Default values after next restarts.

## 13.4 Default Parameters List

### Host Information

- Comment (Optional): FPS-3003 USB MFP Server
- Host Name: FPS-3003
- Workgroup: LevelOne
- Code Page of File Server: Western European
- Product ID: FPS-3003 xxxx, where xxxx represents the last 4 bytes of Ethernet address.

### TCP/IP

- Automatically get IP using DHCP
- Default IP: 192.168.1.100
- Default Subnet Mask: 255.255.255.0

### Protocols

- Enable SMB Print/File Server
- Enable IPP Printing
- Enable LPR Printing  
Device: FPS-3003  
Port Name:
  - USB1\_LPR (queue name: USB1\_LQ)
  - USB2\_LPR (queue name: USB2\_LQ)
- Enable Raw TCP Printing  
Device: FPS-3003  
Port Name:
  - USB1\_RAW: TCP port 9100
  - UBB2\_RAW: TCP port 9101
- Enable SANE Server  
SANE Port: 6566
- FTP Server  
FTP Port: 21  
Passive Mode: Disabled  
Set Maximum Session Number: Disabled  
FTP Authentication: Disabled

### SNMP

- Authentic Community: public
- Trap Community: public

- SysContact: sales@LevelOne.com
- SysName: FPS-3003 USB MFP Server
- SysLocation: www.LevelOne.com
- EnableAuthenTrap: 2 (disable)

### **User Account**

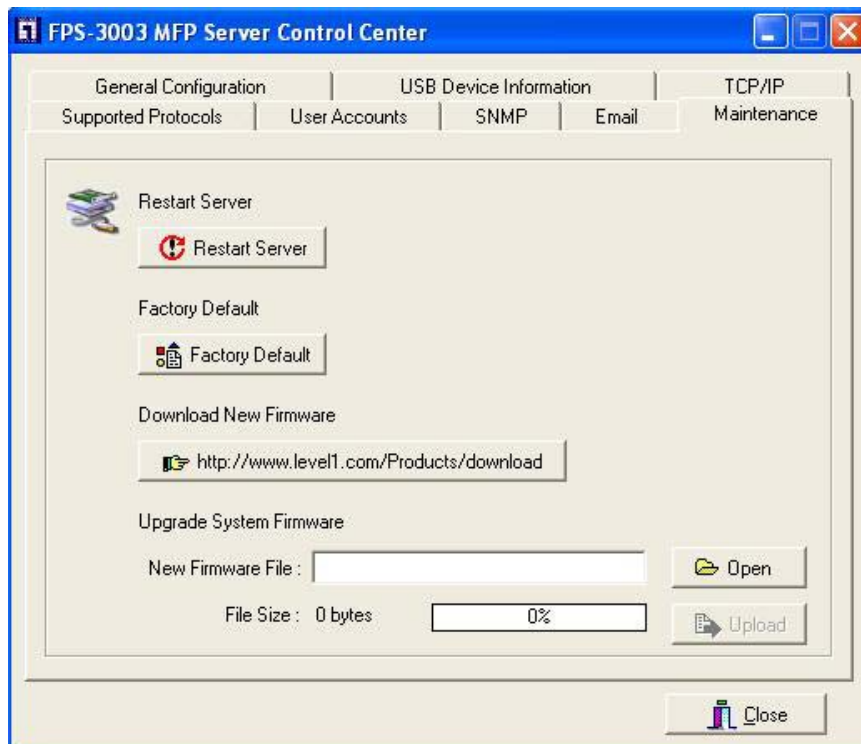
- Administrator:admin
- Password: admin

## Chapter14 Upgrade New Firmware

This chapter describes how to upgrade your new firmware. You can use the following Procedures to upgrade new firmware

### Procedure A: Using PC User Software

1. Open the FPS-3003 MFP Control Center. It will automatically search the existing servers and display their status.
2. Select the server that you want to upgrade the firmware. Double click the selected server and enter Administrator Name and Password. Please note that the default values of Administrator and Password are *admin*.
3. Select the **Maintenance** button.



4. Click **Open** your new firmware file and click **Upgrade**.
5. Wait about 15 seconds for system reboot.

### Procedure B: Using Server's Web Pages

1. Power on FPS-3003. Suppose FPS-3003 is in DHCP mode.
2. Check FPS-3003's IP address.
3. First, run FPS-3003 control center. The control center will

automatically search FPS-3003 on the LAN. Then FPS-3003's IP address will be shown in control center.

4. Run any web browser, like Microsoft Internet Explorer. Go to <http://a.b.c.d> to access FPS-3003's home page, where a.b.c.d is FPS-3003's IP address.
5. Click "Maintenance" at the left side menu.

### **Maintenance**

[Factory Default](#)

[Download New Firmware](#)

[Upgrade Firmware](#)

6. Login FPS-3003 with administrator "admin" and password "admin".
7. Click "Upgrade Firmware".
8. Click "Browse" button to choose the file of new FPS-3003 firmware.
9. Click "Upload" button to start firmware upgrade.
10. Wait about 15 seconds for system reboot.

### **Procedure C: Using Init Button and TFTP Client**

1. Simultaneously press Init button and power on (plug the power adaptor line) the server until LED indicators of Power, USB1 and USB2 blink. After that, the servers will operate using the factory default values after next restarts.
2. Start the TFTP client Tool which contains in the CD-Rom: *Image Burner*
3. Type the server's Fallback IP address: 192.168.1.100 and click **Open Image** to open your new firmware.
4. Click **Upload Image**

## Chapter15 Init Button

The Init button is used for:

1. **Print Configuration Report:** Press **Init** button for exceeding 3 seconds and then the connected HP printer or PCL supported printer will print out the system configuration.

```
System Configuration

Host Information:
Comments:   FPS-3003 USB MFP Server
Server Name: FPS-3003
Workgroup Name: Digital Data Communications
File Server Authentication: Public
File Server Code Page: SJIS

TCP/IP Status
IP Address : 192.168.0.100
Subnet Mask : 255.255.255.0
Gateway : 0.0.0.0
DNS Server : 0.0.0.0
DHCP Server : 0.0.0.0
Lease Time : 0 (seconds)

Supported Protocol Status
SMB Printing Protocol
Path(USB1):\\FPS-3003\psc 1300 ser
Path(USB2):None
LPR Printing Protocol
IP Address: 192.168.0.100
Queue Name(USB1): USB1_LQ
Queue Name(USB2): None
Raw TCP Printing Protocol
TCP Port(USB1): 9100
TCP Port(USB2): 9101
IPP Printing: disabled
Rendezvous: disabled
FTP File Server: enabled
Passive Mode: off
FTP Port: 21
SANE Server: enabled
SANE Port: 6566
NetBEUI: disabled
AppleTalk: disabled
SMTP Protocol
SMTP Server Name:
Subject:
Sender Address(From):
Receiver Address(To):
Cc:

USB Status
USB1:
Printer:
- Name: psc 1300 ser
- Model: psc 1300 series
- Description:
Scanner:
- Name: hpoj:slc:usb:USB1_Scanner
- Model: psc 1300 series
- Description: multi-function peripheral
USB2:
Printer: none
Scanner: none
```

2. **Maintenance:** Simultaneously press **Init** button and turn on (plug the power adaptor line) the server until USB1 and USB2 LED indicators simultaneously blink. After that, the server will do the following tasks:
  - A. Perform a Factory Default of the MFP server, which will restore most of the parameters and settings to factory default values,

- B. Perform a TFTP server. You can upgrade new firmware using any TFTP client tool.

## Chapter16 Technical Specifications

<p><u>Supported Printers</u></p> <p>Support for printers and MFPs from Brother, Canon, Epson, HP, IBM, Kyocera, Lexmark, Minolta, NEC, Oce, OKI, Ricoh, Sharp, Star, TEC, Toshiba, Zebra, Xerox, etc.</p> <p>Please note that the server do not support GDI printers.</p> <p><u>Supported Scanners</u></p> <p>Support for scanners of MFPs from HP office jet and some recommended scanners.</p> <p><u>Print Server Supported Systems</u></p> <ul style="list-style-type: none"> <li>• Microsoft Windows: 98, Me, 2000, XP, and 2003</li> <li>• Unix/Linux</li> </ul> <p><u>File Server Supported Systems</u></p> <ul style="list-style-type: none"> <li>• Microsoft Windows: 98, Me, 2000, XP, and 2003</li> <li>• Unix/Linux</li> </ul> <p><u>File Server Supported Code Pages</u></p> <ul style="list-style-type: none"> <li>• Western Europe and United States</li> <li>• Central Europe</li> <li>• Greek</li> <li>• Cyrillic</li> <li>• Japanese (Shift JIS)</li> <li>• Korean</li> <li>• Traditional Chinese (Big 5)</li> <li>• Simplified Chinese (GB 2312)</li> <li>• Thai</li> </ul>	<p><u>Firmware Upgrade</u></p> <p>Firmware upgrade using the internal web pages, Windows Tool, and TFTP</p> <p><u>Network Connection</u></p> <ul style="list-style-type: none"> <li>• LAN: 10/100 Mbps Ethernet</li> </ul> <p><u>MFP Connection</u></p> <ul style="list-style-type: none"> <li>• 2 USB 1.1/2.0 Low and Full speed.</li> <li>• Bi-directional support</li> </ul> <p><u>Hardware</u></p> <ul style="list-style-type: none"> <li>• 2 USB 1.1/2.0 Full-speed host ports</li> <li>• Ethernet 10/100 Mbps</li> <li>• ARM9-based RISC microprocessor, operating at 166MHz</li> <li>• Memory: 2 MB Flash, 8 MB RAM</li> </ul> <p><u>Front Panel</u></p> <ul style="list-style-type: none"> <li>• 5 LED indicators: Power, Link, Status, USB1 and USB2</li> <li>• Init button to perform factory default, upgrade firmware, and print configuration</li> </ul> <p><u>Power Consumption</u></p> <ul style="list-style-type: none"> <li>• Power provided by external supply (5V 2A).</li> <li>• Maximum consumption 10W</li> </ul> <p><u>Dimensions</u></p> <ul style="list-style-type: none"> <li>• Height 2.6 cm</li> <li>• Width: 7.6 cm</li> </ul>
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<ul style="list-style-type: none"> <li>• Arabic</li> </ul> <p><b><u>Scan Server Supported Systems</u></b></p> <ul style="list-style-type: none"> <li>• Microsoft Windows: 98, 2000, XP and 2003</li> </ul> <p><b><u>Supported Protocols</u></b></p> <ul style="list-style-type: none"> <li>• General <ul style="list-style-type: none"> <li>- DHCP, FTP, HTTP, SNMP v1/v2c/v3</li> </ul> </li> <li>• Print Server <ul style="list-style-type: none"> <li>- TCP/IP: LPR, Raw TCP, NetBIOS over TCP/IP (SMB), IPP,</li> </ul> </li> <li>• File Server <ul style="list-style-type: none"> <li>- SMB: NetBIOS over TCP/IP</li> <li>- FTP</li> </ul> </li> <li>• Scan Server <ul style="list-style-type: none"> <li>- SANE Server</li> </ul> </li> </ul> <p><b><u>Supported Web Browsers</u></b></p> <p>Any standard web browser (Netscape 6.x or higher and MS Internet Explorer 5.x or higher).</p> <p><b><u>MFP Server Management</u></b></p> <ul style="list-style-type: none"> <li>• Internal web pages for configuration, monitoring and firmware upgrading</li> <li>• Windows tool for installation, configuration, monitoring and firmware upgrading</li> </ul>	<ul style="list-style-type: none"> <li>• Depth: 10.4 cm</li> <li>• Weight: 125 g</li> </ul> <p><b><u>Environmental</u></b></p> <ul style="list-style-type: none"> <li>• Temperature: 40-105 °F (5-40 °C)</li> <li>• Humidity 0 – 70%</li> </ul> <p><b><u>Approvals</u></b></p> <ul style="list-style-type: none"> <li>• EMC: <ul style="list-style-type: none"> <li>- EN 55022/1998</li> <li>- EN 55024:1998</li> <li>- EN 61000-3-2</li> <li>- EN 61000-3-3</li> <li>- FCC part 15 Subpart B, Class A</li> </ul> </li> <li>• Safety: <ul style="list-style-type: none"> <li>- EN 60950</li> </ul> </li> </ul> <p><b><u>Included Accessories</u></b></p> <ul style="list-style-type: none"> <li>• Quick Installation Guide</li> <li>• Power supply</li> <li>• Installation CD</li> </ul>
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# Chapter17 Appendix

## 17.1 Compatibility List

- FPS-3003 USB MFP server should support most USB printers (except Host-based/GDI printers), and USB disks or USB memory cards.
- FPS-3003 USB MFP server should support the scanners of HP Office Inkjet Series all-in-one printers (MFP). The supported MFPs are list below.

Model	MFP Series
HP Office jet	4100 series, 4200 series, 5500 series, 6100 series, 7100 series, 9100 series, PSC 1200 series, PSC 1300series, PSC 2400 series, PSC 2500 series
HP LaserJet all-in-ones	HP LaserJet 1220, HP LaserJet 3200, HP LaserJet 3200se, HP LaserJet 3200m, HP LaserJet 3300, HP LaserJet 3310, HP LaserJet 3320, HP LaserJet 3330
Others	

- FPS-3003 USB MFP server should support the following printers to print configuration report using Init button

Model	Printer
Business Inkjet	1100 series, 2300 series, 2600 series, 3000 series
Desk jet	3600 series, 5100 series, 5550 series, 5600series, 5850 series, 6122 series, 6127 series, 9300 series, 9600 series, 995c series, cp1700 series
Office jet	4100 series, 4200 series, 5500 series, 6100 series, 7100 series, 9100 series, PSC 1200 series, PSC 1300series, PSC 2400 series, PSC 2500 series
Photo smart	140 series, 240 series, 7200 series, 7600

	series, 7700 series, 7900 series
Laser Printer	most PCL black & white and color printers